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# (54) NOVEL p-TERPHENYL COMPOUNDS

(57) The present invention provides a selective suppressor of the IgE production comprising a compound which suppresses the IgE production in a process from a differentiation of a mature B cell into an antibody-producing cell to the production of an antibody and which does not suppress or weakly suppresses the production of IgG, IgM and/or IgA which are produced at the same time, a compound of the formula (I):

$$R^{1}$$
 $R^{4}$ 
 $R^{5}$ 
 $R^{8}$ 
 $R^{9}$ 
 $R^{10}$ 
 $R^{11}$ 
 $X-Y$  (I)

wherein  $R^1$  -  $R^{13}$  are hydrogen, halogen, lower alkyl, lower alkoxy or the like, X is - O-, -CH<sub>2</sub>-, -NR<sup>14</sup>- or -S(O)p- and Y is lower alkyl, lower alkenyl or the like, a process for producing the same and a pharmaceutical composition comprising the same.

## Description

### Technical Field

[0001] The present invention relates to a novel para-terphenyl compound, a process for producing the same, a selective suppressor of the IgE production, an immunosuppressor and an anti-allergic agent.

# Background Art

[0002] A serious problem of a transplantation of a tissue or an organ which is frequently performed in recent years is a rejection symptom for excluding a transplanted part after an operation. Prevention of the rejection symptom is very important for a success of the transplantation.

[0003] Various immunosuppressors such as azathioprine, corticoid, Cyclosporin A, Tacrolimus and the like are developed and come into practical use for prevention and a treatment of a rejection symptom against a transplantation of an organ or a tissue or a graft-versus-host reaction which is caused by a bone marrow transplantation. But they are not so satisfactory in view of their effects and side effects.

[0004] Allergic diseases such as atopic dermatitis, allergic rhinitis, bronchial asthma, allergic conjunctivitis and the like globally tend to increase in recent years and become serious problems. The conventional antiinflammatory agents are suppressors of releasing chemical mediators from mast cells, receptor inhibitors of the chemical mediators released, suppressors of allergic inflammation reaction or the like. All of these are agents for symptomatic therapy and are not fundamental therapeutic agents for allergic diseases.

[0005] As an fundamental therapeutic agent for allergic diseases, a suppressor of the IgE antibody production has been expected.

[0006] One of compounds which have a suppressive effect on the IgE production is Suplatast Tosilate (IPD-1151-T). This is reported to act on T cell of type 2 (Th2 cell) to suppress the IL-4 production and to suppress a differentiation of B cells to IgE antibody-producing cells (Jpn. Pharmacol. (1993) 61, 31-39).

[0007] As compounds which directly act on B cells to suppress the IgE antibody production, for example, DSCG (Intal) or Nedcromil sodium which are degranulation inhibitors of mast cells are exemplified. These are reported to inhibit a class-switch of B cells (J. Exp. Med. (1994) 180: 663-671, J. Allergy Clin. Immunol. (1996) 97: 1141-1150). In J. Med. Chem. (1997) 40: 395-407, a compound which directly acts on B cells to suppress the IgE production is described.

[0008] Because immune globulins are necessary for phylaxis and a suppression of immune globulins other than IgE antibody is not preferable, an inhibitor which has a high selectivity to IgE and a potent effect has been desired.

[0009] The compounds which have an antiinflammatory effect and ortho-terphenyl structure are described in JP-A 60-13730, J. Med. Chem.(1996) 39: 1846-1856 and WO96/10012, and the compounds which have the same effect and biphenyl structure are described in JP-B 43-19935, JP-A 62-294650 and WO96/18606.

[0010] The compounds which have para-terphenyl structure are described in Chemical & Pharmaceutical Bulletin, 24 (4), 613-620 (1976), The Journal of Antibiotics, 32 (6), 559-564 (1979) and Agricultural Biological Chemistry, 49 (3), 867-868 (1985) but an immunosuppressive or antiinflammatory effect of these compounds is not described at all.

# 40 Disclosure of Invention

[0011] An object of the present invention is to provide a selective suppressor of the IgE production, an immunosuppressor, and/or an anti-allergic agent which has a potent suppressive effect on the IgE production, an immunosuppressive effect and/or an anti-allergic effect. Other object of the present invention is to provide novel compounds which have the above effects and a process for producing the same.

[0012] The present invention provides a selective suppressor of the IgE production, an immunosuppressor and/or an anti-allergic agent comprising a compound which suppresses the IgE production in a process from a differentiation of a mature B cell into an antibody-producing cell to the production of an antibody and which does not suppress or weakly suppresses the production of IgG, IgM and/or IgA which are produced at the same time. The present invention provides a method for selectively suppressing the IgE production or for suppressing an immune reaction or a method for treating and/or preventing allergic diseases comprising administering the compound. In another embodiment, the present invention provides use of the compound for the manufacture of a medicament for selectively suppressing the IgE production, suppressing the immune reaction or treating and/or preventing allergic diseases.

[0013] The present invention provides a compound of the formula (I) as an example of the compounds which has the above effects:

$$R^{1}$$
  $R^{4}$   $R^{5}$   $R^{8}$   $R^{9}$   $R^{12}$   $R^{13}$   $R^{13}$ 

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wherein R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup>, R<sup>9</sup>, R<sup>10</sup>, R<sup>11</sup>, R<sup>12</sup> and R<sup>13</sup> are each independently hydrogen, hydroxy, halogen, carboxy, optionally substituted lower alkyl, optionally substituted lower alkoxy, optionally substituted lower alkylthio, optionally substituted lower alkoxycarbonyl, optionally substituted acyloxy, optionally substituted lower alkylsulfonyl, optionally substituted lower alkylsulfonyl, optionally substituted lower alkylsulfonyloxy, optionally substituted lower alkylsulfonyloxy, optionally substituted lower alkylsulfonyloxy, optionally substituted amino, optionally substituted carbamoyl, optionally substituted sulfamoyl or optionally substituted heterocyclyl,

X is -O-, -CH<sub>2</sub>-,-NR<sup>14</sup>- wherein R<sup>14</sup> is hydrogen, optionally substituted lower alkyl, optionally substituted lower alkenyl or acetyl, or -S(O)p- wherein p is an integer of 0 to 2,

Y is optionally substituted lower alkyl, optionally substituted lower alkenyl, optionally substituted lower alkynyl, optionally substituted acyl, optionally substituted cycloalkyl, optionally substituted cycloalkenyl, optionally substituted aryl or optionally substituted heterocyclyl, and Y may optionally be substituted lower alkoxy when X is - CH<sub>2</sub>- and may optionally be substituted lower alkoxycarbonyl, optionally substituted lower alkylsulfonyl or optionally substituted arylsulfonyl when X is -O- or - NR<sup>14</sup>-,

R<sup>1</sup> and R<sup>4</sup>, R<sup>1</sup> and R<sup>2</sup>, R<sup>2</sup> and R<sup>3</sup>, R<sup>4</sup> and R<sup>5</sup>, R<sup>6</sup> and R<sup>7</sup>, R<sup>8</sup> and R<sup>9</sup>, R<sup>10</sup> and R<sup>11</sup>, R<sup>12</sup> and R<sup>13</sup>, R<sup>11</sup> and -X-Y, or R<sup>13</sup> and -X-Y taken together may form a 5- or 6-membered ring which may contain one or more of O, S or NR<sup>15</sup> wherein R<sup>15</sup> is hydrogen, optionally substituted lower alkyl, optionally substituted arylsulfonyl and which may optionally be substituted,

excluding compounds wherein one or more of R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup> and R<sup>9</sup> are halogen and the others are hydrogen, all of R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup> and R<sup>9</sup> are halogen and all of R<sup>2</sup>-R<sup>13</sup> are hydrogen, halogen or cyano,

provided that  $R^1$  is not hydrogen, fluorine, optionally substituted lower alkyl or optionally substituted lower alkoxy, all of  $R^2$ ,  $R^3$ ,  $R^4$ ,  $R^5$  and  $R^{12}$  are hydrogen, or  $R^{13}$  is not hydrogen or halogen when  $R^6$ ,  $R^7$ ,  $R^8$  and  $R^9$  are all simultaneously hydrogen, and further provided that  $R^1$  is not methyl or acetyloxy,  $R^{13}$  is not hydrogen, optionally substituted lower alkoxycarbonyl or optionally substituted carbamoyl, or - X-Y is not methoxy when at least one of  $R^6$ ,  $R^7$ ,  $R^8$  and  $R^9$  is a substituent other than hydrogen,

and excluding a compound of the formula (I'):

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wherein R1 is hydrogen or hydroxy and R13 is hydroxy or methoxy, pharmaceutically acceptable salt, hydrate or prodrug thereof.

[0014] The present invention provides a pharmaceutical composition, more specifically a selective suppressor of the IgE production, an immunosuppressor or an anti-allergic agent, comprising the compound (I), pharmaceutically acceptable salt, hydrate or prodrug thereof.

[0015] The present invention provides a selective suppressor of the IgE production, an immunosuppressor and/or an anti-allergic agent comprising a compound of the formula (I"):

$$R^{1}$$
  $R^{3}$   $R^{6}$   $R^{7}$   $R^{10}$   $R^{11}$   $X-Y$   $(I'')$   $R^{4}$   $R^{5}$   $R^{8}$   $R^{9}$   $R^{12}$   $R^{13}$ 

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wherein R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup>, R<sup>9</sup>, R<sup>10</sup>, R<sup>11</sup>, R<sup>12</sup> and R<sup>13</sup> are each independently hydrogen, hydroxy, halogen, carboxy, optionally substituted lower alkyl, optionally substituted lower alkoxy, optionally substituted lower alkenyloxy, optionally substituted lower alkylsulfionyl, optionally substituted lower alkylsulfionyl, optionally substituted lower alkylsulfionyloxy, optionally substituted lower alkylsulfionyloxy.

X is -O-, - $CH_2$ -, - $NR^{14}$ - wherein  $R^{14}$  is hydrogen, optionally substituted lower alkyl, optionally substituted lower alkenyl or acetyl, or -S(O)p- wherein p is an integer of 0 to 2.

Y is optionally substituted lower alkyl, optionally substituted lower alkenyl, optionally substituted lower alkyl, optionally substituted acyl, optionally substituted cycloalkenyl, optionally substituted aryl or optionally substituted heterocyclyl, and Y may optionally be substituted lower alkoxy when X is - CH<sub>2</sub>- and may optionally be substituted lower alkoxycarbonyl, optionally substituted lower alkylsulfonyl or optionally substituted arylsulfonyl when X is -O- or - NR<sup>14</sup>,

 $R^1$  and  $R^4$ ,  $R^1$  and  $R^2$ ,  $R^2$  and  $R^3$ ,  $R^4$  and  $R^5$ ,  $R^6$  and  $R^7$ ,  $R^8$  and  $R^9$ ,  $R^{10}$  and  $R^{11}$ ,  $R^{12}$  and  $R^{13}$ ,  $R^{11}$  and -X-Y, or  $R^{13}$  and -X-Y taken together may form a 5- or 6-membered ring which may contain one or more of O, S or  $NR^{15}$  wherein  $R^{15}$  is hydrogen, optionally substituted lower alkeryl or optionally substituted arylsulfonyl and which may optionally be substituted, excluding a compound of the formula (I'):

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wherein R<sup>1'</sup> is hydrogen or hydroxy and R<sup>13'</sup> is hydroxy or methoxy, pharmaceutically acceptable salt, hydrate or prodrug thereof.

[0016] The present invention provides a method for selectively suppressing the IgE production, suppressing an immune reaction or treating or preventing allergic diseases comprising administering the compound (I) or (I"). In another embodiment, the present invention provides use of the compound (I) or (I") for manufacturing of a medicament for selectively suppressing the IgE production, suppressing the immune reaction or treating or preventing allergic diseases.

[0017] In one of the other embodiments, the present invention provides a process for producing a compound of the formula (I'''):

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$$R^{1}$$
  $R^{2}$   $R^{3}$   $R^{6}$   $R^{7}$   $R^{10}$   $R^{11}$   $X-Y$   $(I^{""})$ 

the compound of the above formula (I) or (I'), pharmaceutically acceptable salt or hydrate thereof

wherein R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup>, R<sup>9</sup>, R<sup>10</sup>, R<sup>11</sup>, R<sup>12</sup> and R<sup>13</sup> are each independently hydrogen, hydroxy, halogen, carboxy, optionally substituted lower alkyl, optionally substituted lower alkoxy, optionally substituted lower alkylthio, optionally substituted lower alkoxycarbonyl, optionally substituted acyloxy, optionally substituted lower alkylsulfonyl, optionally substituted lower alkylsulfonyl, optionally substituted lower alkylsulfonyl, optionally substituted amino, optionally substituted carbamoyl, optionally substituted sulfamoyl or optionally substituted heterocyclyl,

X is -O-, -CH<sub>2</sub>-, -NR<sup>14</sup>- wherein R<sup>14</sup> is hydrogen, optionally substituted lower alkyl, optionally substituted lower alkenyl or acetyl, or -S(o)p- wherein p is an integer of 0 to 2,

Y is optionally substituted lower alkyl, optionally substituted lower alkenyl, optionally substituted lower alkynyl, optionally substituted acyl, optionally substituted cycloalkyl, optionally substituted cycloalkenyl, optionally substituted aryl or optionally substituted heterocyclyl, and Y may optionally be substituted lower alkoxy when X is - CH<sub>2</sub>- and may optionally be substituted lower alkoxycarbonyl, optionally substituted lower alkylsulfonyl or optionally substituted arylsulfonyl when X is -O- or - NR<sup>14</sup>,

R<sup>1</sup> and R<sup>4</sup>, R<sup>1</sup> and R<sup>2</sup>, R<sup>2</sup> and R<sup>3</sup>, R<sup>4</sup> and R<sup>5</sup>, R<sup>6</sup> and R<sup>7</sup>, R<sup>8</sup> and R<sup>9</sup>, R<sup>10</sup> and R<sup>11</sup>, R<sup>12</sup> and R<sup>13</sup>, R<sup>11</sup> and -X-Y, or R<sup>13</sup> and -X-Y taken together may form a 5- or 6-membered ring which may contain one or more of O, S or NR<sup>15</sup> wherein R<sup>15</sup> is hydrogen, optionally substituted lower alkyl, optionally substituted lower alkenyl, optionally substituted arylsulfonyl, and which may optionally be substituted,

excluding a compound wherein one or more of R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup> and R<sup>9</sup> are halogen and the others are hydrogen, all of R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup> and R<sup>9</sup> are halogen and all of R<sup>2</sup>-R<sup>13</sup> are hydrogen, halogen or cyano,

provided that  $R^1$  is not hydrogen, fluorine, optionally substituted lower alkyl or optionally substituted lower alkoxy, all of  $R^2$ ,  $R^3$ ,  $R^4$ ,  $R^5$  and  $R^{12}$  are hydrogen or  $R^{13}$  is not hydrogen or halogen when  $R^6$ ,  $R^7$ ,  $R^8$  and  $R^9$  are all simultaneously hydrogen, and further provided that  $R^1$  is not methyl or acetyloxy,  $R^{13}$  is not hydrogen, optionally substituted lower alkoxycarbonyl or optionally substituted carbamoyl or - X-Y is not methoxy when at least one of  $R^6$ ,  $R^7$ ,  $R^8$  and  $R^9$  is a substituent other than hydrogen, pharmaceutically acceptable salt or hydrate thereof, which comprises reacting a compound of the formula (II):

$$Z \xrightarrow{R^{10}} R^{11}$$
 $Z \xrightarrow{R^{12}} R^{13}$ 
 $X - Y \quad (jj)$ 

with a compound of the formula (III):

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$$R^2$$
  $R^3$   $R^6$   $R^7$ 

$$R^1 \longrightarrow R^5$$
  $R^8$   $R^9$ 

wherein, in the formulas (II) and (III), R<sup>1</sup> - R<sup>13</sup>, X and Y are the same as defined in the above formula (I), either of A and Z is dihydroxyborane, di(lower)alkoxyborane, di(lower)alkylborane,

$$OB-$$
 or  $OB-$ 

and the other is halogen or -OSO<sub>2</sub>(C<sub>q</sub>F<sub>2q+1</sub>)- wherein q is an integer of 0 to 4,

or reacting a compound of the formula (II'):

$$R^{1}$$
 $R^{4}$ 
 $R^{5}$ 
 $R^{5}$ 
 $R^{1}$ 

with a compound of the formula (III'):

$$A \xrightarrow{R^8} R^9 R^{12} R^{13}$$

wherein, in the formulas (II') and (III'), R<sup>1</sup> - R<sup>13</sup>, X and Y are the same as defined in the above formula (I) and A and Z are the same as defined in the above formulas (II) and (III). As another process, the present invention provides a process for producing the compound of the above formula (I"), (I) or (I'), pharmaceutically acceptable salt or hydrate thereof comprising the reaction of a compound of the formula (IV):

$$A^{1} \xrightarrow{R^{8} R^{9}} A^{2} \quad (IV)$$

with a compound of the formula (V):

wherein, in the formulas (IV) and (V),  $R^1 - R^9$  are the same as defined in the above formula (I),  $Z^1$  is the same as Z defined in the above formula (II),  $A^1$  and  $A^2$  are each independently the same as A defined in the above formula (III) and the reactivity of  $A^1$  is higher than or equal to that of  $A^2$ , followed by the reaction with a compound of the formula (VI):

$$Z^2 \longrightarrow X-Y \quad (VI)$$

wherein  $R^{10}$ - $R^{13}$ , X and Y are the same as defined in the above formula (I) and  $Z^2$  is the same as Z defined in the above formula (II) and a process for producing the compound of the above formula (I'''), (I) or (I'), pharmaceutically acceptable salt, hydrate thereof comprising the reaction of a compound of the formula (IV'):

wherein  $R^6$ - $R^9$  is the same as defined in the above formula (I),  $A^1$  and  $A^2$  are each independently the same as A defined in the above formula (III) and the reactivity of  $A^2$  is higher than or equal to that of  $A^1$ , with a compound of the above formula (VI), followed by the reaction with a compound of the above formula (VI).

**Brief Description of the Drawings** 

# [0018]

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Figure 1 shows an antibody production-suppressive effect on human peripheral lymphocytes of the compound (1-839) of the present invention. The ordinate represents a percentage of the amount of antibodies to that of antibodies which are produced in the absence of the compound. The abscissa represents a concentration of the compound.

Figure 2 shows an antibody production-suppressive effect on human peripheral lymphocytes of the compound No. 36. The ordinate represents a percentage of the amount of antibodies to that of antibodies which are produced in the absence of the compound. The abscissa represents a concentration of the compound.

Figure 3 shows an antibody production-suppressive effect on mouse spleen lymphocytes of the compound (I-967) of the present invention. The ordinate represents a percentage of the amount of antibodies to that of antibodies which are produced in the absence of the compound. The abscissa represents a concentration of the compound. Figure 4 shows a suppressive effect of the compound (I-963) of the present invention for an infiltration of inflammatory cells to irrigation water of pulmonary alveolus by an antigen stimulation on mice. The ordinate represents the number of inflammatory cells and the abscissa represents the number of total inflammatory cells, the number of macrophages, the number of eosinophils and the number of neutrophils. The white column represents a group inhaling saline instead of ovalbumin, the black column represents a group inhaling an antigen to cause inflammation and without administration of any compound of the present invention, and the gray column represents a group inhaling an antigen to cause inflammation with administration of the compound of the present invention.

# Best Mode for Carrying Out the Invention

[0019] In the present specification, the term "halogen" includes fluorine, chlorine, bromine and iodine. Fluorine or chlorine is preferable. The halogen in the term "halogeno(lower)alkyl", "halogeno(lower)alkenyl" and "halogenoaryl" is the same as above.

[0020] The term "lower alkyl" represents straight or branched chain alkyl having 1 to 10 carbon atoms, preferably 1 to 8 carbon atoms, more preferably 1 to 6 carbon atoms and most preferably 1 to 4 carbon atoms. For example, included are methyl, ethyl, n-propyl, isopropyl, n-butyl, isobutyl, sec-butyl, tert-butyl, n-pentyl, isopentyl, neopentyl, hexyl, isoheptyl, n-octyl, isooctyl, n-nonyl, n-decyl and the like.

[0021] As substituents of the "optionally substituted lower alkyl" in R<sup>1</sup> - R<sup>13</sup>, R<sup>14</sup> and R<sup>15</sup> exemplified are halogen; hydroxy; lower alkoxy optionally substituted with lower alkoxy; carboxy; lower alkoxycarbonyl; acyloxy and the like and the lower alkyl may be substituted with one or more of these substituents at any possible positions.

[0022] As substituents for "optionally substituted lower alkyl" in Y exemplified are halogen; hydroxy; carboxy; lower alkoxycarbonyl; lower alkoxy optionally substituted with lower alkoxy; acyl; acyloxy; amino optionally substituted with hydroxy, lower alkoxy, carboxy(lower)alkoxy, aryl(lower)alkoxy or heterocyclyl; hydrazono optionally substituted with carbamoyl or lower alkoxycarbonyl; cycloalkyl optionally substituted with lower alkyl; cycno; carbamoyl optionally substituted with lower alkyl; cyano; carbamoyl optionally substituted with lower alkyl;



wherein ring A represents cycloalkyl or heterocyclyl;

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aryl optionally substituted with lower alkyl, halogeno(lower)alkyl, carboxy(lower)alkyl, lower alkoxycarbonyl(lower)alkyl, halogen, hydroxy, lower alkoxy, carboxy, lower alkoxycarbonyl, lower alkoxycarbonyl, acyloxy, nitro, cyano, amino, lower alkoxycarbonylamino, acylamino, lower alkylsulfonylamino, lower alkylamino or guanidino; or

heterocyclyl optionally substituted with lower alkyl (optionally substituted with heterocyclyl), halogen, hydroxy, carbon, lower alkoxycarbonyl, lower alkylsulfonyl, lower alkylarylsulfonyl, mercapto, lower alkylthio or heterocyclyl optionally substituted with aryl.

[0023] The alkyl part of "halogeno(lower)alkyl", "hydroxy(lower)alkyl", "carboxy(lower)alkyl", "lower alkoxycarbonyl(lower)alkyl", "lower alkylsulfonyloxy", "lower alkylsulfonyloxy", "lower alkylsulfonyloxy", "lower alkylsulfonyloxy", "lower alkylsulfonyloxy", "di(lower)alkylcarbamoyl", "di(lower)alkylborane, "lower alkoxy", "carboxy(lower)alkoxy", "aryl(lower)alkoxy", "lower alkoxy(lower)alkoxy", "lower alkoxyaryl" or "di(lower)alkoxyborane" is the same as defined in the above "lower alkyl". As substituents in the case of being "optionally substituted" exemplified are halogen; hydroxy; lower alkoxy; carboxy; lower alkoxycarbonyl; acyloxy; cycloalkyl; aryl optionally substituted with lower alkyl; heterocyclyl and the like. These substituents may substitute at one or more of any possible positions.

[0024] The part of lower alkyl in "lower alkoxycarbonyl" is the same as the above defined "lower alkyl" and substituents for "optionally substituted lower alkoxycarbonyl" are the same as those for the above "optionally substituted lower alkoxy".

[0025] The part of "lower alkoxycarbonyl" in "lower alkoxycarbonyl(lower)alkyl", "lower alkoxycarbonyl(lower)alkenyl" or "lower alkoxycarbonylamino" is the same as the above defined "lower alkoxycarbonyl".

[0026] The term "lower alkenyl" represents straight or branched chain alkenyl having 2 to 10 carbon atoms, preferably 2 to 8 carbon atoms and more preferably 3 to 6 carbon atoms. For example included are vinyl, propenyl, isopropenyl, butenyl, isobutenyl, butadienyl, pentenyl, isopentenyl, pentadienyl, hexenyl, isohexenyl, hexadienyl, heptenyl, octenyl, nonenyl, decenyl and the like and these have one or more double bonds at any possible positions. Substituents for "optionally substituted lower alkenyl" are the same as that for the above "optionally substituted lower alkenyl".

[0027] The part of lower alkenyl in "lower alkoxycarbonyl (lower) alkenyl", "halogeno (lower) alkenyl", "lower alkenyloxy", "lower alkenyloxycarbonyl" or "lower alkenylamino" is the same as the above defined "lower alkenyl".

[0028] Substituents for "optionally substituted lower alkenyloxy" are the same as those for the above "optionally substituted lower alkoxy".

[0029] The term "lower alkynyl" represents straight or branched chain alkynyl having 2 to 10 carbon atoms, preferably 2 to 8 carbon atoms and more preferably 3 to 8 carbon atoms. Specifically, included are ethynyl, propynyl, butynyl, pentynyl, heptynyl, octynyl, nonyl, decynyl and the like. These have one or more triple bonds at any possible positions and may further have a double bond. Substituents for "optionally substituted lower alkynyl" are the same as those for the above "optionally substituted lower alkoxy".

[0030] The term "acyl" represents aliphatic acyl which includes chain acyl having 1 to 10 carbon atoms, preferably 1 to 8 carbon atoms, more preferably 1 to 6 carbon atoms, most preferably 1 to 4 carbon atoms and cyclic acyl having 3 to 8 carbon atoms, preferably 3 to 6 carbon atoms, and aroyl. Specifically, included are formyl, acetyl, propionyl, butyryl, isobutyryl, valeryl, pivaloyl, hexanoyl, acryloyl, propioloyl, methacryloyl, crotonoyl, cyclohexanecarbonyl, benzoyl and the like. Substituents for "optionally substituted acyl" are the same as those for "optionally substituted lower alkoxy" and aroyl may further be substituted with lower alkyl.

[0031] The part of acyl in "acyloxy" or "acylamino" is the same as the above identified "acyl" and substituents for "optionally substituted acyloxy" are the same as those for the above "optionally substituted acyl".

[0032] The term "cycloalkyl" represent cyclic hydrocarbon having 3 to 6 carbon atoms and includes, for example. cyclopropyl, cyclobutyl, cyclopentyl cyclohexyl and the like. As substituents for "optionally substituted cycloalkyl" exemplified are lower alkyl, halogen, hydroxy, carboxy, lower alkoxycarbonyl, lower alkoxy, aryl, heterocyclyl and the like and the cycloalkyl may be substituted at any possible positions.

[0033] The term "cycloalkenyl" represents the group having one or more double bonds at any possible positions in the above cycloalkyl and included are, for example, cyclopropenyl, cyclobutenyl, cyclopentenyl, cyclohexenyl and the like. Substituents for "optionally substituted cycloalkenyl" are the same as those for the above identified

"cycloalkyl".

[0034] The term "optionally substituted amino" includes substituted amino and unsubstituted amino and substituents exemplified are lower all optionally substituted with lower alkylaryl etc.; lower alkenyl optionally substituted with halogen; lower alkylarylsulfonyl; lower alkylarylsulfonyl; lower alkoxycarbonyl; sulfamoyl; acyl optionally substituted with halogen; carbamoyl and the like.

[0035] The term "optionally substituted carbamoyl" includes substituted carbamoyl and unsubstituted carbamoyl and substituted severally; lower alkylsulfonyl; sulfamoyl; acyl optionally substituted with halogen; amino and the like.

[0036] The term "optionally substituted sulfamoyl" includes substituted sulfamoyl and unsubstituted sulfamoyl and substituents exemplified are lower alkyl optionally substituted with aryl; lower alkenyl and the like.

[0037] The term "aryl" includes phenyl, naphthyl, anthryl, indenyl, phenanthryl and the like. Substituents for "optionally substituted aryl" exemplified are lower alkyl optionally substituted with halogen or carboxy; hydroxy; halogen; lower alkoxy; lower acyloxy; carboxy; lower alkoxycarbonyl; lower alkenyloxycarbonyl; amino optionally substituted with lower alkyl, lower alkylsulfonyl, lower alkoxycarbonyl or acyl; guanidino; nitro; aryl; heterocyclyl and the like and "optionally substituted aryl", may be substituted with one or more of these substituents at any possible positions.

[0038] The part of aryl in "lower alkylaryl", "halogenoaryl", "lower alkoxyaryl", "arylsulfonyl", "aryl(lower)alkoxy", "lower alkylarylsulfonyl", "heterocyclyl substituted with aryl", "aroyl" or "aroyloxy" is the same as the above "aryl" and the substitutents for "optionally substituted" are also the same as those for in the above "optionally substituted aryl".

[0039] The term "heterocyclyl" represents a heterocyclic group which contains one or more of hetero atoms arbitrarily selected from a group of O, S and N and exemplified are 5-or 6- membered aromatic heterocyclyl such as pyrrolyl, imidazolyl, pyrazolyl, pyridyl, pyridazinyl. pyrmidinyl, pyrazinyl, triazolyl, triazinyl, isoxazolyl, oxazolyl, oxadiazolyl, isothiazolyl, thiazolyl, thiaziazolyl, furyl, thienyl etc., condensed aromatic heterocyclyl such as indolyl, carbazolyl, acridinyl, benzimidazolyl, indazolyl, indolizinyl, quinolyl, isoquinolyl, cinnolinyl, phthalazinyl, quinazolinyl, naphthyridinyl, quinoxalinyl, purinyl, pteridinyl, benzisoxazolyl, benzoxazolyl, benzoxadiazolyl, benzisothiazolyl, benzothiazolyl, benzothiazoly aziazolyl, benzofuryl, benzothienyl, benzotriazolyl etc., and alicyclic heterocyclyl such as dioxanyl, thiiranyl, oxiranyl, oxathioranyl, azetidinyl, thianyl, pyrrolidinyl, pyrrolinyl, imidazolidinyl, imidazolinyl, pyrazolidinyl, pyrazolinyl, piperidyl, piperazinyl, morpholinyl etc. As substituents for "optionally substituted heterocyclyl" exemplified are lower alkyl, lower alkenyl, hydroxy, halogen, carboxy, lower alkoxycarbonyl, lower alkoxy, mercapto, lower alkylthio, lower alkylsulfonyl, aryl, heterocyclyl and the like and the heterocyclyl may be substituted with one or more of these substituents at any possible positions. The part of heterocycle in "heterocyclyl substituted with aryl" is the same as the above "heterocyclyl". [0040] The term "5- or 6-membered ring which may contain one or more of O, S or NR<sup>15</sup> and may optionally be substituted" represents a 5- or 6-membered ring which is formed by R1 and R4, R1 and R2, R2 and R3, R4 and R5, R6 and R<sup>7</sup>, R<sup>8</sup> and R<sup>9</sup>, R<sup>10</sup> and R<sup>11</sup>, R<sup>12</sup> and R<sup>13</sup>, R<sup>11</sup> and -X-Y, or R<sup>13</sup> and -X-Y with the two carbon atoms constituting phenyl to which the above substituents are attached. For example, the above substituents taken together form -(CH<sub>2</sub>)<sub>3</sub>-, -CH=N-S-, -O-CH=N-, -N=CH-O-, -O-N=CH-, -CH=N-O-, -NR<sup>15</sup>-CH=N-, -N=CH-NR<sup>15</sup>-, -NR<sup>15</sup>-N=CH-, -CH=N-NR<sup>15</sup>-, -NR<sup>15</sup>-N=CH-, -N N=CH-CH=CH-, -CH=CH-CH=N-, -N=N-CH=CH-, -CH=CH-N=N-, -N=CH-N=CH-, -CH=N-CH=N-, -N=CH-CH=N-1 or 2 and n is 2 or 3) or the like and further these and the two carbon atoms constituting phenyl taken together form a 5-or 6- membered ring. These rings may be substituted with one or more of hydroxy; halogen; lower alkyl optionally sub-

substituted" are the same as the above unless otherwise defined.

[0041] The term "lower alky!idene" represents straight or branched alkylidene having 1 to 6 carbon atoms, preferably 1 to 4 carbon atoms, more preferably 1 to 3 carbon atoms and includes, for example, methylene, ethylidene, isopropylidene, vinylidene, methylidyne and the like.

stituted with lower alkoxycarbonyl or heterocyclyl; lower alkenyl optionally substituted with halogen; lower alkyliden optionally substituted with halogen; or the like. The substitutents of "5- or 6-membered ring which may contain one or more of O or NR<sup>15</sup> and may optionally be substituted", "5-or 6-membered ring which contains one or more of O or NR<sup>15</sup> and may optionally be substituted" and "5-or 6-membered ring which contains one or more of O and may optionally be

[0042] The term "all of R<sup>2</sup>-R<sup>13</sup> are hydrogen, halogen or cyano" represents, for example, the case that R<sup>2</sup>-R<sup>13</sup> are the same or different and hydrogen, halogen or cyano. For example, included are the case that all of R<sup>2</sup>-R<sup>13</sup> are hydrogen, the case that all of them are halogen, the case that some are halogen and the others are hydrogen, the case that some are cyano and the others are hydrogen and the like.

[0043] The term "compound (I)", "compound (I")" or "compound (I"")" also includes formable and pharmaceutically acceptable salts of each compounds. As "the pharmaceutically acceptable salt", exemplified are salts with mineral acid such as hydrochloric acid, sulfuric acid, nitric acid, phosphoric acid, hydrofluoric acid, hydrobromic acid and the like; salts with organic acids such as formic acid, acetic acid, tartaric acid, lactic acid, citric acid, fumaric acid, maleic acid,

succinic acid and the like; salts with organic bases such as ammonium, trimethylammonium, triethylammonium and the like; salts with alkaline metals such as sodium, potassium and the like and salts with alkaline earth metals such as calcium, magnesium and the like.

[0044] The compound of the present invention includes hydrates and all of stereoisomers, for example, atropisomers etc. thereof.

[0045] The compound of the present invention includes prodrugs thereof. The term "prodrug" means a group of compounds which are easily changeable to the compounds (I) or (I") which have activities in living bodies. The prodrug may be prepared by usual reactions. As usual methods for producing predrugs exemplified is the substitution of hydroxy by acyloxy substituted with carboxy, sulfo, amino, lower alkylamino or the like, phosphonoxy or the like. The substitution of hydroxy attached to R<sup>1</sup> by -OCOCH<sub>2</sub>COOH, -OCOCH=CHCOOH, -OCOCH<sub>2</sub>SO<sub>3</sub>H, -OPO<sub>3</sub>H<sub>2</sub>, -OCOCH<sub>2</sub>NMe<sub>2</sub>, -OCO-Pyr (Pyr is pyridine) or the like is preferable.

[0046] In the present specification, the term "compound (I)" represents a group comprising novel compounds excluding the compound (I'), the term "compound (I')" represents a group comprising the compound (I) and known compounds and the term "compound (I")" represents a group comprising the compound (I) and the compound (I').

[0047] All of the compounds (I) and (I") have a suppressive effect on the IgE production, an immunosuppressive effect and/or an anti-allergic effect and the following compounds are specifically preferable.

[0048] In the formulas (I) and (I"),

1) a compound wherein R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup>, R<sup>9</sup>, R<sup>10</sup>, R<sup>11</sup>, R<sup>12</sup> and R<sup>13</sup> are each independently hydrogen, hydroxy, halogen, carboxy, optionally substituted lower alkyl, optionally substituted lower alkoxy, optionally substituted lower alkenyl, optionally substituted lower alkoxycarbonyl, optionally substituted acyloxy, optionally substituted lower alkylthio, optionally a

X is -O-, -CH<sub>2</sub>-,-NR<sup>14</sup>- wherein R<sup>14</sup> is hydrogen or optionally substituted lower alkyl, or -S(O)p- wherein p is an integer of 0 to 2,

Y is optionally substituted lower alkyl, optionally substituted lower alkenyl, optionally substituted lower alkynyl, optionally substituted acyl or optionally substituted cycloalkenyl, and

 $R^1$  and  $R^4$ ,  $R^1$  and  $R^2$ ,  $R^8$  and  $R^9$ ,  $R^{11}$  and -X-Y, or  $R^{13}$  and -X-Y taken together may form a 5- or 6-membered ring which may contain one or more of O or  $NR^{15}$ ,

2) a compound wherein R<sup>1</sup> is hydrogen, hydroxy, halogen, carboxy, optionally substituted lower alkyl, optionally substituted lower alkoxy, optionally substituted lower alkoxy, optionally substituted lower alkoxycarbonyl, optionally substituted lower alkylsulfonyloxy, lower alkylsulfonyl, formyl, optionally substituted amino, lower alkylsulfinyl, acyloxy, nitro, cyano, optionally substituted sulfamoyl or heterocyclyl,

R<sup>2</sup> is hydrogen, hydroxy, halogen, optionally substituted lower alkyl or optionally substituted lower alkylsulfonyloxy.

R<sup>3</sup> is hydrogen, hydroxy, halogen or optionally substituted lower alkoxy.

R<sup>4</sup> is hydrogen, optionally substituted lower alkyl, halogen, optionally substituted lower alkoxy, nitro or optionally substituted amino,

R<sup>5</sup> is hydrogen, optionally substituted lower alkoxy, lower alkoxycarbonyl or carboxy,

R<sup>6</sup> is hydrogen, halogen, optionally substituted lower alkyl, carboxy, lower alkoxycarbonyl, nitro, formyl, amino or lower alkylsulfonyloxy,

R<sup>7</sup> and R<sup>8</sup> are each independently hydrogen, halogen, optionally substituted lower alkyl, optionally substituted lower alkoxy, formyl or optionally substituted amino,

R<sup>9</sup> is hydrogen, hydroxy, carboxy, optionally substituted lower alkyl, optionally substituted lower alkoxy, optionally substituted lower alkoxycarbonyl, optionally substituted lower alkylsulfonyloxy, formyl, optionally substituted carbamoyl or optionally substituted amino,

R<sup>10</sup> is hydrogen or lower alkoxy.

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R<sup>11</sup> is hydrogen, halogen, optionally substituted lower alkyl, carboxy, lower alkoxycarbonyl, optionally substituted lower alkylsulfonyloxy, formyl, nitro or amino, R<sup>12</sup> is hydrogen,

R<sup>13</sup> is hydroxy, halogen, carboxy, optionally substituted lower alkyl, optionally substituted lower alkoxy, optionally substituted lower alkenyloxy, optionally substituted acyloxy, optionally substituted lower alkylsulfonyloxy, formyl, nitro or optionally substituted amino, and further R<sup>13</sup> may be hydrogen in the formula (I"),

Y is optionally substituted lower alkyl, optionally substituted lower alkenyl, optionally substituted lower alkynyl, optionally substituted acyl or optionally substituted cycloalkenyl and Y may be optionally substituted lower

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lower alkynyl, optionally substituted cycl koxycarbonyl or optionally substituted ac r may form a 5- or 6-membered ring which above and which may optionally be substituted with cyl; cycloalkenyl; cyano; imino optionally er)alkoxy or heterocyclyl; hydrazono optio optionally substituted with lower alkyl or a ly substituted with amino (optionally substituted with amino (optionally substituted, nitro, acyloxy, lower alkyl (optionally substituted, lower alkyl (optionally substituted); lower alkenyloxycarbonyl or kyl;

er alkenyl optionally substituted with halog erocyclyl; lower alkynyl optionally substituti ).

re preferably Y is lower alkyl optionally sul paryl, lower alkoxyaryl, heterocyclyl or acyl (hereinafter referred to as "Y is Y3"),

st preferably Y is isopropyl, ethoxycarbonyl henylmethyl, methoxyphenylmethyl, pyridy hydroxymethylbutenyl, pentenyl, methylp mopropenyl, dibromopropenyl, fluoropropenylpropenyl (hereinafter referred to as "Y is

ompound wherein R1 is R1-2, R2 is R2-1, R <sup>9</sup> is R9-2, R<sup>10</sup> is R10-1, R<sup>11</sup> is R11-1, R<sup>12</sup> R<sup>4</sup>, R<sup>8</sup> and R<sup>9</sup>, or R<sup>13</sup> and - X-Y taken tog O or NR15 wherein R15 is the same as def empound wherein R1 is R1-2, R2 is R2-1, R <sup>9</sup> is R9-1, R<sup>10</sup> is R10-1, R<sup>11</sup> is R11-1, R<sup>12</sup> R4, R8 and R9, or R13 and - X-Y taken tog O or NR<sup>15</sup> wherein R<sup>15</sup> is the same as def ompound wherein R1 is R1-2, R2 is R2-1, R 19 is R9-1, R<sup>10</sup> is R10-1, R<sup>11</sup> is R11-1, R<sup>12</sup> R4, R8 and R9 or R13 and - X-Y taken toge O or NR15 wherein R15 is the same as def ompound wherein R1 is R1-1, R2 is R2-1, F 19 is R9-2, R<sup>10</sup> is R10-1, R<sup>11</sup> is R11-1, R<sup>12</sup> i R<sup>4</sup>, R<sup>8</sup>and R<sup>9</sup>, or R<sup>13</sup> and-X-Y taken togel O or NR<sup>15</sup> wherein R<sup>15</sup> is the same as def ompound wherein R1 is R1-1, R2 is R2-1, F t<sup>9</sup> is R9-2, R<sup>10</sup> is R10-1, R<sup>11</sup> is R11-1, R<sup>12</sup> i R4, R8 and R9, or R13 and - X-Y taken toge O or NR<sup>15</sup> wherein R<sup>15</sup> is the same as def ompound wherein R1 is R1-1, R2 is R2-1, R 1<sup>9</sup> is R9-1, R<sup>10</sup> is R10-1, R<sup>11</sup> is R11-1, R<sup>12</sup> R<sup>4</sup>, R<sup>8</sup> and R<sup>9</sup> or R<sup>13</sup> and - X-Y taken toge i O or NR<sup>15</sup> wherein R<sup>15</sup> is the same as def ompound wherein R1 is R1-2, R2 is R2-1, R 19 is R9-2, R<sup>10</sup> is R10-1, R<sup>11</sup> is R11-1, R<sup>12</sup> R4, R8 and R9, or R13 and - X-Y taken tog f O or NR<sup>15</sup> wherein R<sup>15</sup> is the same as def ompound wherein R1 is R1-2, R2 is R2-1, R ₹<sup>9</sup> is R9-2, R<sup>10</sup> is R10-1, R<sup>11</sup> is R11-1, R<sup>12</sup> R4, R8 and R9, or R13 and - X-Y taken too f O or NR<sup>15</sup> wherein R<sup>15</sup> is the same as defi ompound wherein R1 is R1-2, R2 is R2-1, R

alkoxycarbonyl, optionally substituted lower alkylsulfonyl or optionally substituted arylsulfonyl w

 $R^1$  and  $R^2$ ,  $R^1$  and  $R^4$ ,  $R^8$  and  $R^9$ ,  $R^{11}$  and -X-Y, or  $R^{13}$  and -X-Y taken together may form a 5-  $\epsilon$  ring which contains one or more of O or  $NR^{15}$  wherein  $R^{15}$  is the same as defined above and whally be substituted,

3) a compound wherein R¹ is hydrogen, hydroxy, halogen, carboxy, optionally substituted lower alkoxy, optionally substituted lower alkenyloxy, optionally substituted lower alkylsulfonyloxy, lower alkylsulfonyl, fo substituted amino, lower alkylsulfinyl, acyloxy, nitro, cyano, optionally substituted sulfamoyl or heter after referred to as "R¹ is R1-1") or R¹ and R² or R⁴ taken together form a 5- or 6-membered ring one or more of O or NR¹5 wherein R¹5 is the same as defined above and which may optionally be

preferably R<sup>1</sup> is hydrogen, hydroxy, halogen, optionally substituted lower alkoxy, optionally substituted lower alkylsulfonyloxy, optionally substituted amino, optionally famoyl (hereinafter referred to as "R<sup>1</sup> is R1-2"), or R<sup>1</sup> and R<sup>2</sup> or R<sup>4</sup> taken together form a 5-or 6-which contains one or more of O or NR<sup>15</sup> wherein R<sup>15</sup> is the same as defined above and which be substituted,

more preferably,  $R^1$  is hydrogen, hydroxy, halogen, lower alkoxy(lower)alkoxy, aryl(lower)alkox loxy, lower alkylsulfonyloxy, amino, lower alkylamino or lower alkenylamino (hereinafter referred 3"), or  $R^1$  and  $R^2$  or  $R^4$  taken together form a 5- or 6-membered ring which contains one or mc wherein  $R^{15}$  is the same as defined above and which may optionally be substituted,

most preferably, R¹ is hydrogen, hydroxy, chlorine, fluorine, methoxymethyloxy, benzyloxy, 3-n loxy, methanesultonyloxy, amino, dimethylamino or 3-methyl-2-butenylamino (hereinafter refer R1-4"), or R¹ and R² or R⁴ taken together form -OCH<sub>2</sub>O- or -CH=CH-NH-,

4) a compound wherein R<sup>2</sup> is hydrogen, hydroxy, halogen, lower alkyl or optionally substituted low loxy (hereinafter referred to as "R<sup>2</sup> is R2-1") or R<sup>1</sup> and R<sup>2</sup> taken together form a 5- or 6-membered tains one or more of O or NR<sup>15</sup> wherein R<sup>15</sup> is the same as defined above and which may optionally preferably R<sup>2</sup> is hydrogen, halogen or alkyl having 1 to 3 carbon atoms (hereinafter referred to as 5) a compound wherein R<sup>3</sup> is hydrogen, hydroxy, halogen or optionally substituted lower alk referred to as "R<sup>3</sup> is R3-1"), preferably R<sup>3</sup> is hydrogen or fluorine (hereinafter referred to as "R<sup>3</sup> is R3-3"), 6) a compound wherein R<sup>4</sup> is hydrogen, optionally substituted lower alkyl, halogen, optionally s

6) a compound wherein R<sup>4</sup> is hydrogen, optionally substituted lower alkyl, halogen, optionally salkoxy, nitro or optionally substituted amino (hereinafter referred to as "R<sup>4</sup> is R4-1") or R<sup>4</sup> and R may form a 5-or 6-membered ring which contains one or more of O or NR<sup>15</sup> wherein R<sup>15</sup> is the sabove and which may optionally be substituted,

preferably  $R^4$  is hydrogen, lower alkyl, lower alkoxy or halogen (hereinafter referred to as "R $^4$  and R $^1$  taken together may form -OCH $_2$ O-,

7) a compound wherein  $R^5$  is hydrogen, optionally substituted lower alkoxy, lower alkoxycarbonyl or inafter referred to as " $R^5$  is R5-1"), preferably  $R^5$  is hydrogen, lower alkoxycarbonyl or carboxy (he to as " $R^5$  is R5-2"), more preferably  $R^5$  is hydrogen (hereinafter referred to as " $R^5$  is R5-3"). 8) a compound wherein  $R^6$  is hydrogen, halogen, optionally substituted lower alkyl, carboxy, lowe nitro, formyl, amino or lower alkylsulfonyloxy (hereinafter referred to as " $R^6$  is R6-1"),

preferably  $R^6$  is hydrogen or lower alkyl or halogen (hereinafter referred to as " $R^6$  is R6-2"), more preferably  $R^6$  is hydrogen, alkyl having 1 to 3 carbon atoms or halogen (hereinafter ref R6-3").

9) a compound wherein R<sup>7</sup> is hydrogen, halogen, optionally substituted lower alkyl, optionally alkoxy, formyl or optionally substituted amino (hereinafter referred to as "R<sup>7</sup> is R7-1"),

preferably R<sup>7</sup> is hydrogen, lower alkyl or lower alkoxy (hereinafter referred to as "R<sup>7</sup> is R7-2"

10) a compound wherein  $R^8$  is hydrogen, halogen, optionally substituted lower alkyl, optionally alkoxy, formyl or optionally substituted amino (hereinafter referred to as " $R^8$  is  $R^8$ -1") or  $R^8$  and

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or 6- membered ring which contains one d

R8 is hydrogen, lower alkyl or lower alkox

nd wherein R<sup>9</sup> is hydrogen, hydroxy, carbo ptionally substituted lower alkenyl, optional onyloxy, formyl, optionally substituted carbo 9-1") or R<sup>9</sup> and R<sup>8</sup> taken together may form may optionally be substituted,

 R<sup>9</sup> is hydrogen, hydroxy, carboxy, option tionally substituted lower alkenyl, optionally ylsulfonyloxy, formyl, optionally substituted as "R<sup>9</sup> is R9-2"),

erably R<sup>9</sup> is hydrogen, hydroxy, lower alkyl oxy(lower)alkoxy, lower alkylsulfonyloxy, di ereinafter referred to as "R<sup>9</sup> is R9-3"), forably, R<sup>9</sup> is hydrogen, hydroxy, methyl

ferably R<sup>9</sup> is hydrogen, hydroxy, methyl, sulfonyl, dimethylcarbamoyl, carboxy, metho

nd wherein R<sup>10</sup> is hydrogen or lower alkoxy nereinafter referred to as "R<sup>10</sup> is R10-2"), and wherein R<sup>11</sup> is hydrogen, halogen, optio substituted lower alkylsulfonyloxy, formyl, notaken together form a 5- or 6-membered rigs defined above and which may optionally the statement of the statemen

y R<sup>11</sup> is hydrogen or halogen (hereinafter re

Ind wherein R<sup>12</sup> is hydrogen, ind wherein R<sup>13</sup> is hydrogen, hydroxy, halog wer alkoxy, optionally substituted lower alk kylsulfonyloxy, formyl, nitro or optionally sub (-Y taken together form a 5- or 6-membered ne as defined above and which may optional

y R<sup>13</sup> is hydrogen, hydroxy, halogen, carboxy oxy, optionally substituted acyloxy, optionally ad amino (hereinafter referred to as "R<sup>13</sup> is Riferably R<sup>13</sup> is hydroxy; halogen; lower alky stionally substituted with lower alkorycarbony gen; aroyloxyl; lower alkylsulfonyloxy; formyl ferably R<sup>13</sup> is hydroxy, fluorine, methyl, hydronylmethyloxy, methoxymethyloxy, chlorolyloxy, dichloropropenyloxy, ethoxycarbonyl, burred to as "R<sup>13</sup> is R13-4"),

and wherein X is -O-, -NR<sup>14</sup>- or -S(O)p- wher R<sup>13</sup> and Y taken together may form a 5-or 6-r is the same as defined above and may option

y X is -O-, -NH-, -NMe- or -SO<sub>2</sub>- (hereinafter (hereinafter referred to as "X is X3") most pr

und wherein Y is optionally substituted lower

R8-2, R9 is R9-1, R10 is R10-1, R11 is R11-1, R12 is hydrogen, R13 is R13-2, X is X1 and Y is Y2, and R<sup>1</sup> and R<sup>4</sup>, R<sup>8</sup> and R<sup>9</sup>, or R<sup>13</sup> and - X-Y taken together may form a 5- or 6-membered ring which con more of O or NR<sup>15</sup> wherein R<sup>15</sup> is the same as defined above and which may optionally be substituted 27) a compound wherein R<sup>1</sup> is R1-1, R<sup>2</sup> is R2-1, R<sup>3</sup> is R3-1, R<sup>4</sup> is R4-1, R<sup>5</sup> is R5-1, R<sup>6</sup> is R6-2, R<sup>7</sup> is R8-2, R<sup>9</sup> is R9-2, R<sup>10</sup> is R10-1, R<sup>11</sup> is R11-1, R<sup>12</sup> is hydrogen, R<sup>13</sup> is R13-2, X is X1 and Y is Y2, and R<sup>1</sup> and R<sup>4</sup>, R<sup>8</sup> and R<sup>9</sup>, or R<sup>13</sup> and - X-Y taken together may form a 5- or 6-membered ring which con more of O or NR<sup>15</sup> wherein R<sup>15</sup> is the same as defined above and which may optionally be substituted 28) a compound wherein R<sup>1</sup> is R1-2, R<sup>2</sup> is R2-2, R<sup>3</sup> is R3-2, R<sup>4</sup> is R4-2, R<sup>5</sup> is R5-2, R<sup>6</sup> is R6-2, R<sup>7</sup> is R8-2, R<sup>9</sup> is R9-2, R<sup>10</sup> is R10-2, R<sup>11</sup> is R11-2, R<sup>12</sup> is hydrogen, R<sup>13</sup> is R13-2, X is X2 and Y is Y2, and or R8 and R9 taken together may form a 5- or 6-membered ring which contains one or more of O, 29) a compound therein  $R^1$  is R1-3,  $R^2$  is R2-2,  $R^3$  is R3-2,  $R^4$  is R4-2,  $R^3$  is R5-2,  $R^6$  is R6-2,  $R^7$  is R8-2, R9 is R9-2, R10 is R10-2, R11 is R11-2, and R1 and R4, or R8 and R9 taken together may form a bered ring which contains one or more of O, 30) a compound wherein R<sup>1</sup> is R1-4, R<sup>2</sup> is R2-2, R<sup>3</sup> is R3-2, R<sup>4</sup> is R4-2, R<sup>5</sup> is R5-2, R<sup>6</sup> is R6-2, R<sup>7</sup> is R8-2, R<sup>9</sup> is R9-2, R<sup>10</sup> is R10-2, R<sup>11</sup> is R11-2, R<sup>12</sup> is hydrogen, R<sup>13</sup> is R13-2, X is X2 and Y is Y2, and or R8 and R9 taken together may form -OCH2O-, 31) a compound wherein R<sup>1</sup> is R1-2, R<sup>2</sup> is R2-2, R<sup>3</sup> is R3-2, R<sup>4</sup> is R4-2, R<sup>5</sup> is R5-2, R<sup>6</sup> is R6-2, R<sup>7</sup> is R8-2, R<sup>9</sup> is R9-3, R<sup>10</sup> is R10-2, R<sup>11</sup> is R11-2, R<sup>12</sup> is hydrogen, R<sup>13</sup> is R13-2, X is X2 and Y is Y2, and or R8 and R9 taken together may form a 5- or 6-membered ring which contains one or more of O, 32) a compound wherein R<sup>1</sup> is R1-2, R<sup>2</sup> is R2-2, R<sup>3</sup> is R3-2, R<sup>4</sup> is R4-2, R<sup>5</sup> is R5-2, R<sup>6</sup> is R6-2, R<sup>7</sup> is

or R<sup>9</sup> and R<sup>9</sup> taken together may form a 5- or 6-membered ring which contains one or more of O, 32) a compound wherein R<sup>1</sup> is R1-2, R<sup>2</sup> is R2-2, R<sup>3</sup> is R3-2, R<sup>4</sup> is R4-2, R<sup>5</sup> is R5-2, R<sup>6</sup> is R6-2, R<sup>7</sup> is R8-2, R<sup>9</sup> is R9-4, R<sup>10</sup> is R10-2, R<sup>11</sup> is R11-2, R<sup>12</sup> is hydrogen, R<sup>13</sup> is R13-2, X is X2 and Y is Y2, an or R<sup>8</sup> and R<sup>9</sup> taken together may form a 5- or 6-membered ring which contains one or more of O, 33) a compound wherein R<sup>1</sup> is R1-2, R<sup>2</sup> is R2-2, R<sup>3</sup> is R3-2, R<sup>4</sup> is R4-2, R<sup>5</sup> is R5-2, R<sup>6</sup> is R6-2, R<sup>7</sup> is R8-2, R<sup>9</sup> is R9-2, R<sup>10</sup> is R10-2, R<sup>11</sup> is R11-2, R<sup>12</sup> is hydrogen, R<sup>13</sup> is R13-3, X is X2 and Y is Y2, an or R<sup>8</sup> and R<sup>9</sup> taken together may form a 5- or 6-membered ring which contains one or more of O,

34) a compound wherein R<sup>1</sup> is R1-2, R<sup>2</sup> is R2-2, R<sup>3</sup> is R3-2, R<sup>4</sup> is R4-2, R<sup>5</sup> is R5-2, R<sup>6</sup> is R6-2, R<sup>7</sup> is

R8-2,  $R^9$  is R9-2,  $R^{10}$  is R10-2,  $R^{11}$  is R11-2,  $R^{12}$  is hydrogen,  $R^{13}$  is R13-4, X is X2 and Y is Y2, and Or  $R^8$  and  $R^9$  taken together may form a 5- or 6-membered ring which contains one or more of O, 35) a compound wherein  $R^1$  is R1-2,  $R^2$  is R2-2,  $R^3$  is R3-2,  $R^4$  is R4-2,  $R^5$  is R5-2,  $R^6$  is R6-2,  $R^7$  R8-2,  $R^9$  is R9-2,  $R^{10}$  is R10-2,  $R^{11}$  is R11-2,  $R^{12}$  is hydrogen,  $R^{13}$  is R13-2, X is X2 and Y is Y3, ard or  $R^8$  and  $R^9$  taken together may form a 5- or 6-membered ring which contains one or more of O, 36) a compound wherein  $R^1$  is R1-3,  $R^2$  is R2-2,  $R^3$  is R3-2,  $R^4$  is R4-2,  $R^5$  is R5-2,  $R^6$  is R6-2,  $R^7$  R8-2,  $R^9$  is R9-3,  $R^{10}$  is R10-2,  $R^{11}$  is R11-2,  $R^{12}$  is hydrogen,  $R^{13}$  is R13-2, X is X2 and Y is Y2, ard or  $R^8$  and  $R^9$  taken together may form a 5- or 6-membered ring which contains one or more of O, 37) a compound wherein  $R^1$  is R1-3,  $R^2$  is R2-2,  $R^3$  is R3-2,  $R^4$  is R4-2,  $R^5$  is R5-2,  $R^6$  is R6-2,  $R^7$  R8-2,  $R^9$  is R9-2,  $R^{10}$  is R10-2,  $R^{11}$  is R11-2,  $R^{12}$  is hydrogen,  $R^{13}$  is R13-3, X is X2 and Y is Y2, and  $R^9$  taken together may form a 5- or 6-membered ring which contains one or more of O,  $R^8$  and  $R^9$  taken together may form a 5- or 6-membered ring which contains one or more of O,

38) a compound wherein  $R^1$  is R1-3,  $R^2$  is R2-2,  $R^3$  is R3-2,  $R^4$  is R4-2,  $R^5$  is R5-2,  $R^6$  is R6-2,  $R^7$  R8-2,  $R^9$  is R9-2,  $R^{10}$  is R10-2,  $R^{11}$  is R11-2,  $R^{12}$  is hydrogen,  $R^{13}$  is R13-2, X is X2 and Y is Y3, at or  $R^8$  and  $R^9$  taken together may form a 5- or 6-membered ring which contains one or more of O, 39) a compound wherein  $R^1$  is R1-2,  $R^2$  is R2-2,  $R^3$  is R3-2,  $R^4$  is R4-2,  $R^5$  is R5-2,  $R^6$  is R6-2,  $R^7$  R8-2,  $R^9$  is R9-3,  $R^{10}$  is R10-2,  $R^{11}$  is R11-2,  $R^{12}$  is hydrogen,  $R^{13}$  is R13-3, X is X2 and Y is Y2, at or  $R^8$  and  $R^9$  taken together may form a 5- or 6-membered ring which contains one or more of O,

40) a compound wherein  $R^1$  is R1-2,  $R^2$  is R2-2,  $R^3$  is R3-2,  $R^4$  is R4-2,  $R^5$  is R5-2,  $R^6$  is R6-3,  $R^7$  R8-2,  $R^9$  is R9-3,  $R^{10}$  is R10-2,  $R^{11}$  is R11-2,  $R^{12}$  is hydrogen,  $R^{13}$  is R13-2, X is X2 and Y is Y3, a or  $R^8$  and  $R^9$  taken together may form a 5- or 6-membered ring which contains one or more of O, 41) a compound wherein  $R^1$  is R1-2,  $R^2$  is R2-2,  $R^3$  is R3-2,  $R^4$  is R4-2,  $R^5$  is R5-2,  $R^6$  is R6-2,  $R^7$  R8-2,  $R^9$  is R9-2,  $R^{10}$  is R10-2,  $R^{11}$  is R11-2,  $R^{12}$  is hydrogen,  $R^{13}$  is R13-3, X is X2 and Y is Y3,  $\epsilon$ 

or  $R^8$  and  $R^9$  taken together may form a 5- or 6-membered ring which contains one or more of O, 42) a compound wherein  $R^1$  is R1-3,  $R^2$  is R2-2,  $R^3$  is R3-2,  $R^4$  is R4-2,  $R^5$  is R5-2,  $R^6$  is R6-2,  $R^7$  R8-2,  $R^9$  is R9-3,  $R^{10}$  is R10-2,  $R^{11}$  is R11-2,  $R^{12}$  is hydrogen,  $R^{13}$  is R13-3, X is X2 and Y is Y2,  $\epsilon$ 

or  $R^8$  and  $R^9$  taken together may form -OCH<sub>2</sub>O-, 43) a compound wherein  $R^1$  is R1-3,  $R^2$  is R2-2,  $R^3$  is R3-2,  $R^4$  is R4-2,  $R^5$  is R5-2,  $R^6$  is R6-2, R R8-2,  $R^9$  is R9-3,  $R^{10}$  is R10-2,  $R^{11}$  is R11-2,  $R^{12}$  is hydrogen,  $R^{13}$  is R13-2, X is X2 and Y is Y3,  $R^{10}$ 

or  $R^8$  and  $R^9$  taken together may form -OCH<sub>2</sub>O-, 44) a compound wherein  $R^1$  is R1-3,  $R^2$  is R2-2,  $R^3$  is R3-3,  $R^4$  is R4-2,  $R^5$  is R5-2,  $R^6$  is R6-2,  $R^6$  R8-2,  $R^9$  is R9-2,  $R^{10}$  is R10-2,  $R^{11}$  is R11-2,  $R^{12}$  is hydrogen,  $R^{13}$  is R13-3, X is X2 and Y is Y3,  $R^8$  or  $R^8$  and  $R^9$  taken together may form -OCH<sub>2</sub>O-,

45) a compound wherein  $R^1$  is R1-2,  $R^2$  is R2-2,  $R^3$  is R3-3,  $R^4$  is R4-2,  $R^5$  is R5-3,  $R^6$  is R6-2,  $R^7$  is R7-2,  $R^8$  is R8-2,  $R^9$  is R9-3,  $R^{10}$  is R10-2,  $R^{11}$  is R11-2,  $R^{12}$  is hydrogen,  $R^{13}$  is R13-3, X is X2 and Y is Y3, and  $R^1$  and  $R^4$ , or  $R^8$  and  $R^9$  taken together may form a 5- or 6-membered ring which contain one or more of O,

46) a compound wherein  $R^1$  is R1-3,  $R^2$  is R2-2,  $R^3$  is R3-3,  $R^4$  is R4-2,  $R^5$  is R5-3,  $R^6$  is R6-3,  $R^7$  is R7-2,  $R^8$  is R8-2,  $R^9$  is R9-3,  $R^{10}$  is R10-2,  $R^{11}$  is R11-2,  $R^{12}$  is hydrogen,  $R^{13}$  is R13-3, X is X3 and Y is Y4, and  $R^1$  and  $R^4$ , or  $R^8$  and  $R^9$  taken together may form -OCH<sub>2</sub>O-,

47) a compound wherein  $R^1$  is R1-4,  $R^2$  is R2-2,  $R^3$  is R3-3,  $R^4$  is R4-2,  $R^5$  is R5-3,  $R^6$  is R6-3,  $R^7$  is R7-2,  $R^8$  is R8-2,  $R^9$  is R9-4,  $R^{10}$  is R10-2,  $R^{11}$  is R11-2,  $R^{12}$  is hydrogen,  $R^{13}$  is R13-4, X is X3 and Y is Y4,  $R^1$  and  $R^4$  taken together may form -  $OCH_2O$ - and  $R^8$  and  $R^9$  taken together may form - $OCH_2CH_2O$ -,

48) a compound wherein the benzene ring which is substituted with R1 - R5 is

$$HO \longrightarrow MSO \longrightarrow F \longrightarrow H_2N \longrightarrow Me_2N \longrightarrow F$$
 $HO_2C \longrightarrow F_3C \longrightarrow HN \longrightarrow MeO \longrightarrow F$ 
 $CI \longrightarrow CI \longrightarrow HN \longrightarrow MeO \longrightarrow F$ 

49) a compound wherein the benzene ring which is substituted with R<sup>6</sup>-R<sup>9</sup> is

50) a compound wherein the benzene ring which is substituted with R<sup>10</sup>-R<sup>13</sup> is

OH, OMs, 
$$CO_2H$$
, OH,  $F$ ,  $NH_2$ , OMe,  $OEt$ ,  $F$ 

51) a compound wherein Y is -CH<sub>2</sub>CH=CMe<sub>2</sub>, -(CH<sub>2</sub>)<sub>2</sub>CH=CMe<sub>2</sub>, -CH<sub>2</sub>CH=CCI<sub>2</sub>, -CH<sub>2</sub>CH=CBr<sub>2</sub>, -CH<sub>2</sub>CH=CF<sub>2</sub>, -CH<sub>2</sub>CH=CHMe, -CH<sub>2</sub>CH=C(Me)CH<sub>2</sub>OH, -CH<sub>2</sub>C=CMe, -CH<sub>2</sub>C<sub>6</sub>H<sub>4</sub>-4-Me, -CH<sub>2</sub>C<sub>6</sub>H<sub>5</sub>, -CH<sub>2</sub>CHMe<sub>2</sub> or -Me, 52) a compound wherein -X-Y is -OCH<sub>2</sub>CH=CMe<sub>2</sub>, -O(CH<sub>2</sub>)<sub>2</sub>CH=CMe<sub>2</sub>, -OCH<sub>2</sub>CH=CCI<sub>2</sub>, -OCH<sub>2</sub>CH=CBr<sub>2</sub>, -OCH<sub>2</sub>CH=CF<sub>2</sub>, -OCH<sub>2</sub>C=CMe, -OCH<sub>2</sub>C<sub>6</sub>H<sub>4</sub>-4-Me, -OCH<sub>2</sub>C<sub>6</sub>H<sub>5</sub>, -NHCH<sub>2</sub>CH=CMe<sub>2</sub>, -N(Me)CH<sub>2</sub>CH=CMe<sub>2</sub>, -NHCH<sub>2</sub>CH<sub>2</sub>CHMe<sub>2</sub>, -NHCH<sub>2</sub>C=CH, or -NMe<sub>2</sub>, or

53) a compound wherein at least seven of the substituents of R<sup>1</sup> - R<sup>13</sup> are hydrogen, preferably at least eight are hydrogen, more preferably at least nine are hydrogen, and their pharmaceutically acceptable salts, their hydrates and their prodrugs.

[0049] A process for producing the compound (I"") is as follows.

# Process for producing the compound (I"") [Process a]

[0050] The compound (I") can be produced by the reaction of a borane compound of the formula (II) and (II') coupled with a biphenyl derivative of the formula (III) and (III') respectively, as shown below.

wherein R<sup>1</sup> - R<sup>13</sup>, X and Y are the same as defined in the above formula (I"), and A and Z are the same as defined in the above formulas (II) and (III), or

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wherein R<sup>1</sup> - R<sup>13</sup>, X and Y are the same as defined in the above formula (I"), and A and Z are the same as defined in the above formulas (II) and (III).

[0051] The compounds (II) and (II') are reacted with the compounds (III) and (III') respectively in a mixture system of an appropriate solvent such as benzene, toluene, dimethylformamide, dimethoxyethane, tetrahydrofuran, dioxane, ethanol, methanol or the like and water or in an anhydrous system in the presence of a palladium catalyst such as Pd(PPh<sub>3</sub>)<sub>4</sub>, PdCl<sub>2</sub>(PPh<sub>3</sub>)<sub>2</sub>, PdCl<sub>2</sub>(OAc)<sub>2</sub>, PdCl<sub>2</sub>(CH<sub>3</sub>CN)<sub>2</sub> or the like, preferably Pd(PPh<sub>3</sub>)<sub>4</sub>, under a basic condition (for example, by K<sub>3</sub>PO<sub>4</sub>, NaHCO<sub>3</sub>, NaOEt, Na<sub>2</sub>CO<sub>3</sub>, Et<sub>4</sub>NCl, Ba(OH)<sub>2</sub>, Cs<sub>2</sub>CO<sub>3</sub>, CsF, NaOH, Ag<sub>2</sub>CO<sub>3</sub> or the like) at room temperature or with heating for several tens minutes to several tens hours to obtain the compound (I''').

[0052] One of substituents A and Z of the compounds to be reacted may be any of the borane groups which are applicable in the Suzuki Reaction (Chemical Communication 1979, 866, Journal of Synthetic Organic Chemistry, Japan, 1993, Vol.51, No.11, 91-100) and dihydroxyborane is preferable. The other may be any of the leaving groups which are applicable in the Suzuki Reaction, for example, halogen, -OSO<sub>2</sub>(C<sub>q</sub>F<sub>2q+1</sub>) wherein q is an integer of 0 to 4, or the like. Specifically, halogen, trifluoromethanesulfonyloxy (hereinafter referred to as OTf) or the like is preferable and bromine, iodine or OTf is more preferable.

[0053] The substituents R<sup>1</sup> - R<sup>13</sup> and -X-Y of the compounds (II), (III), (III) and (IIII') may be any of the groups which do not affect the Suzuki Reaction, for example, any groups other than halogen and -OSO<sub>2</sub>(C<sub>q</sub>F<sub>2q+1</sub>) wherein q is an integer of 0 to 4.

[0054] For example, Y may be optionally substituted lower alkyl, optionally substituted lower alkenyl, optionally substituted lower alkynyl, optionally substituted acyl, optionally substituted cycloalkyl, optionally substituted cycloalkenyl, optionally substituted aryl or optionally substituted heterocyclyl, Y may be optionally substituted lower alkoxy when X is  $-CH_2$ - and Y may be optionally substituted lower alkoxycarbonyl, optionally substituted lower alkylsulfonyl or optionally substituted arylsulfonyl when X is -C- or  $-NR^{14}$ -. Even if  $R^1$  -  $R^{13}$  or Y is halogen, these reactions can be carried out without difficulty when the reactivity of the substituent A with the substituent Z is higher than that of halogen with either of substituents A and Z.

[0055] Even if one of R<sup>1</sup> -R<sup>13</sup> and -X-Y is hydroxy, the above reactions can be carried out preferably after the protection of hydroxy group with a usual hydroxy-protecting group (for example, metoxymethyl, benzyl, tert-butyldimethylsilyl, methansulfonyl, p-toluenesulfonyl or the like), followed by the removal of them by usual methods.

[0056] As processes for producing the compound (I'''), the above mentioned Suzuki Reaction is most preferable in view of the efficiency and easiness but silicon, zinc, tin or the like can be used in place of the borane group in the above

scheme.

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[0057] For example, in the case that one of A and Z is  $-SiR^{17}_{3-r}(Hal)_r$ , wherein  $R^{17}$  is independently lower alkyl, Hal is halogen and r is an integer of 1 to 3 and the other is halogen or  $-OSO_2(C_qF_{2q+1})$  wherein q is an integer of 0 to 4, the coupling reaction may be carried out using a usual palladium catalyst (Synlett (1991) 845-853, J. Org. Chem. 1996, 61, 7232-7233). Examples of preferable palladium catalysts are (i-Pr<sub>3</sub>P)<sub>2</sub>PdCl<sub>2</sub>, [(dcpe)PdCl<sub>2</sub>] (dcpe=Cy<sub>2</sub>PCH<sub>2</sub>CH<sub>2</sub>PCy<sub>2</sub>),  $(\eta^3-C_3H_5PdCl)_2$  and the like.

[0058] Even in the case that one of A and Z is -SnR<sup>18</sup><sub>3</sub> wherein R<sup>18</sup> is each independently lower alkyl and the other is halogen, acetyloxy or -OSO<sub>2</sub>( $C_qF_{2q+1}$ ) wherein q is an integer of 0 to 4, an objective compound can be obtained using a usual palladium catalyst (preferably Pd(PPh<sub>3</sub>)<sub>4</sub> or the like) (Angew. Chem. Int. Ed. Engl. 25 (1986) 508-524).

[0059] In the case that one of A and Z is -Zn(Hal) wherein Hal is halogen and the other is halogen, an objective compound can be obtained (Acc. Chem. Res. 1982, 15, 340-348). Any usual palladium catalyst is applicable and Pd(PPh<sub>3</sub>)<sub>4</sub>, PdCl<sub>2</sub>(dppf), PdCl<sub>2</sub>(PPh<sub>3</sub>)<sub>2</sub>, PdCl<sub>2</sub>(P(o-Tolyl)<sub>3</sub>)<sub>2</sub>, Pd(OAc)<sub>2</sub> and the like are exemplified as preferable examples.

[0060] All of these reactions may be carried out in a suitable solvent (for example, dimethylformamide, tetrahydrofuran or the like) at room temperature or with heating for several tens minutes to several tens hours.

### Process for producing the compound (I''') [Process b]

[0061] As another easier processes for producing the compound (I"), the following process wherein the compound of the formulas (IV), (V) and (VI) are coupled is also applicable.

wherein R<sup>1</sup> - R<sup>13</sup>, X and Y are the same as defined in the above formulas (I), (II) and (III) and A<sup>1</sup>, A<sup>2</sup>, Z<sup>1</sup> and Z<sup>2</sup> are the same as defined in the above A and Z, respectively. The reactivity of A<sup>1</sup> is higher than or equal to that of A<sup>2</sup> in the compound (IV) and the reactivity of A<sup>2</sup> is higher than or equal to that of A<sup>1</sup> in the compound (IV).

[0062] For production of the compound (I") by the above process the compound (IV) may be reacted with the compound (V), followed by the reaction with the compound (VI) without an isolation. The objective compound can be obtained also by a process wherein the compound (IV') is reacted with the compound (VI), followed by a reaction with the compound (V).

[0063] Because the reactions of the substituents  $A^1$  and  $Z^1$  and the substituents  $A^2$  and  $Z^2$  are necessary to obtain the objective compound, the reactivity of the substituent  $A^1$  and that of  $A^2$  should be different. A preferable example is the combination that  $A^1$  is iodine and  $A^2$  is bromine or -OTf in the compound (IV). Conversely in the compound (IV) iodine for  $A^2$  and bromine or -OTf for  $A^1$  are preferable. In the case that the compound (IV) or (IV') is a symmetry compound, the objective compound is obtained even if  $A^1$  and  $A^2$  are the same group.

[0064] The substituents  $Z^1$  and  $Z^2$  may be the same or different group.

[0065] Various other conditions in this process are the same as those in the "Process a".

[0066] In the above compounds, the substituents  $R^1$  -  $R^{13}$  may be any of the groups which do not affect the reaction (for example, a group other than halogen and -  $OSO_2(C_qF_{2q+1})$ ) wherein q is an integer of 0 to 4) or any of the groups which do not affect the reaction and are changeable to  $R^1$  -  $R^{13}$  by a usual reaction. In the latter case the substituents may be changed to  $R^1$  -  $R^{13}$  in suitable steps according to the reaction of each compound.

[0067] For example, in the case that a substituent is formyl and an objective substituent is hydroxy, after the substituent is changed to formyloxy by the Baeyer-Villiger reaction etc., a usual hydrolysis reaction may be carried out under an acidic or alkaline condition. Specifically, a compound which has formyl is reacted with a peroxy acid such as peracetic acid, perbenzoic acid, m-chloroperbenzoic acid, trifluoroperacetic acid, hydrogen peroxide or the like in a suitable solvent such as 1,2-dichloroethane, chloroform, dichloromethane, carbon tetrachloride, benzene or the like at - 20 °C or with heating for several minutes to several tens hours, followed by the hydrolysis of the obtained compound which has formyloxy under an acidic condition (for example, with heating with hydrochloric acid) or under a basic condition (for example, with heating with sodium hydroxide).

[0068] In the case that a substituent is formyl and an objective substituent is hydrorymethyl, the compound which has formyl may be reacted with a reductant such as sodium borohydride, lithium borohydride, zinc borohydride, triethyllithium borohydride, alminium hydride, diisobutylalminium hydride or the like in a solvent (for example, methanol, ethanol, isopropanol, dimethylsulfoxide, diethylene glycol dimethoxyethane, tetrahydrofuran, benzene, toluene, cyclohexane or the like) which is suitable for the reductant at -20 °C to 80 °C, preferably under ice-cooling or at room temperature, for several tens minutes to several hours.

[0069] In the case that a substituent is formyl and an objective substituent is alkenyl having additional carbon atoms, an objective compound can be obtained by the Wittig Reaction (Organic Reaction, 1965, vol.14, p. 270).

[0070] In the case that a substituent is formyl and an objective substituent is carboxy, the compound which has formyl may be reacted with an oxidizing agent such as sodium chlorite, the Jones Reagent, chromic anhydride or the like in a solvent such as tert-butanol, acetone or the like which is suitable for the oxidizing agent at 0 °C or with heating for several hours. The reaction is preferably carried out by addition of 2-methyl-2-buten, sodium dihydrogenphosphate or the like if needed.

[0071] In the case that a substituent is hydroxy and an objective substituent is substituted lower alkoxy, the compound which has hydroxy may be reacted with a proper alkylating agent in the presence of a base such as sodium carbonate, sodium bicarbonate, potassium carbonate, calcium hydroxide, barium hydroxide, calcium carbonate or the like in a suitable solvent such as tetrahydrofuran, acetone, dimethylformamide, acetonitrile or the like. Specifically, the reaction of a compound which has hydroxy with a proper halogenated compound such as methyl iodoacetate, ethyl chloroacetate, propyl chloroacetate or the like can give a compound of which substituent is alkoxycarbonyl(lower)alkoxy.

[0072] In the case that a substituent is carboxy and an objective substituent is carbamoyl, the compound which has carboxy may be carbamoylated with an amine such as ammonia, dimethylamine or the like at 0 °C or with heating for several minutes to several hours in a suitable solvent such as tetrahydrofuran, dimethylformamide, diethyl ether, dichloromethane or the like, if necessary after activation by an activating agent such as thionyl chloride, an acid halide, an acid anhydride, an activated ester or the like.

[0073] In the case that a substituent is hydrogen and an objective substituent is halogen, the compound which has hydrogen may be halogenated by a halogenating agent which is generally used (for example, bromine, chlorine, iodine, sulfuryl chloride, N-bromosuccinimide, N-iodosuccinimide or the like) in a suitable solvent such as chloroform, dichloromethane, carbon tetrachloride, acetonitrile, nitromethane, acetic acid, acetic anhydride or the like, if necessary in the presence of a catalyst such as the Lewis acid, hydrochloric acid, phosphoric acid or the like at -20 °C or with heating for several minutes to several tens hours.

[0074] The compound (I) can be obtained by a reaction of the compound (II) which has a substituent -X-Y with the compound (III) or a reaction of the compound (III) which has a substituent -X-Y with the compound (II). Further, the compound (I) can also be obtained by a reaction of the compound (II) or (III) which has a substituent - W which is convertible into a substituent -X-Y with the compound (III) or (III), followed by a conversion of a substituent -W into a substituent -X-Y.

[0075] For example, in the case of a compound wherein -W is hydroxy or protected hydroxy, an objective substituent such as lower alkyl, lower alkenyl, lower alkynyl, acyl, cycloalkyl, cycloalkenyl, aryl, heterocyclyl, lower alkoxy or the like may be introduced by a usual reaction.

[0076] Concretely, to obtain a compound wherein X is -O-, a compound wherein - W is hydroxy is synthesized and dissolved in a suitable solvent (for example, dimethylformamide, tetrahydrofuran, acetone, benzene, dioxane, acetonitrile or the like), followed by addition of a base such as hydroxides or carbonates of alkaline metals or alkaline-earth metals (for example, sodium carbonate, sodium bicarbonate, potassium carbonate, calcium hydroxide, barium hydroxide, calcium carbonate and the like) or tertiary amines such as triethylamine and the like. To the reactant is added a compound Y-V wherein V is halogen or  $-OSO_2(C_qF_{2q+1})$  wherein q is an integer of 0-4 (for example, prenyl bromide, cyclohexenyl bromide, cinnamyl bromide, 1-bromo-2-penten, geranyl bromide, 5-bromo-2-methyl-2-penten, 1,3-dichloro-2-buten, 3-chloropropyne, prenyl triflate, cyclohexenyl triflate, 1,3-trichloropropene or the like) at - 20 °C or with

heating for several minutes to several tens hours to obtain an objective compound wherein -W has been converted into -O-Y.

[0077] To obtain a compound wherein X is  ${}^{\circ}$ CH<sub>2</sub>-,  ${}^{\circ}$ -N R<sup>14</sup>- or  ${}^{\circ}$ -S-, a compound wherein - W is hydroxy is reacted with trifluoromethanesulfonic anhydride etc. in a solvent such as anhydrous dichloromethane, chloroform, carbon tetrachloride or the like in the presence of a base such as pyridine, triethylamine or the like to obtain a triflate. Then, the obtained compound is reacted with Y-V' wherein V' is  ${}^{\circ}$ -CH<sub>2</sub>ZnI,  ${}^{\circ}$ -SH,  ${}^{\circ}$ -NHR<sup>14</sup> in the presence of a catalyst such as palladium, nickel or the like in a suitable solvent such as tetrahydrofuran, dimethylformamide, diethyl ether, dimethoxyethane or the like to give an objective compound.

[0078] In the case that X is NR<sup>14</sup>, a compound wherein W is NH<sub>2</sub> may be reacted with a ketone or an aldehyde in a suitable solvent such as tetrahydrofuran, methanol or the like, followed by reduction with a suitable reductant such as sodium borohydride, sodium cyanoborohydride, zinc hydrochloride or the like or by catalytic reduction to obtain an objective compound.

[0079] A usual reaction of a compound wherein W is NH<sub>2</sub> with Y-V" wherein Y is acyl, lower alkylsulfonyl optionally substituted or arylsulfonyl optionally substituted and V" is a leaving group such as halogen gives a compound wherein -X-Y is -NH-Y.

[0080] To obtain a compound wherein X is -SO- or -SO<sub>2</sub>-, a compound wherein X is - S- which is synthesized by the above mentioned process may be oxidized with a usual oxidizing agent such as m-chloroperbenzoic acid.

[0081] A compound of the present invention wherein -X-Y is lower alkenyloxy is dissolved in a solvent such as ethanol, ethyl acetate or the like and hydrogenated with a catalyst such as Pd-carbon powder, platinum, rhodium, ruthenium, nickel or the like to give a compound wherein -X-Y is lower alkoxy.

[0082] A reaction of a compound wherein -X-Y is lower alkenyloxy with m-chloroperbenzoic acid or the like in a solvent such as dichloromethane, chloroform, benzene, hexane, tert-butanol or the like gives a compound wherein -X-Y is epoxidated lower alkoxy.

[0083] In the case that a compound has a substituent interfering of a reaction, the substituent may be protected with a suitable protecting group in advance and the protecting group may be left in a suitable step by a usual method. For example, if hydroxy interferes the reaction, hydroxy may be protected with methoxymethyl, methanesulfonyl, benzyl, trifluoromethanesulfonyl, tert-butyldimethylsilyl or the like, followed by deprotection in a suitable step.

[0084] For example for a protection of hydroxy with methanesulfonyl, a compound which has hydroxy may be reacted with methanesulfonyl chloride in a solvent such as dichloromethane, chloroform, carbon tetrachloride or the like in the presence of a base such as triethylamine, pyridine or the like under ice-cooling or at room temperature for several hours. The protected compound may be deprotected with 1-4 N sodium hydroxide, potassium hydroxide, aqueous solution thereof sodium methoxide, ethyl magnesium bromide or the like in a solvent such as dimethysulfoxide, dimethylformamide, tetrahydrofuran, dioxane, dimethoxyethane or the like at room temperature or with heating for several tens minutes to several hours.

[0085] When methoxymethyl is used as a protecting group of hydroxy, a compound which has hydroxy may be reacted with chloromethylmethylether in a solvent such as tetrahydrofuran, dioxane, dimethoxyethane or the like in the presence of sodium hydride, diisopropylethylamine or the like to obtain a compound which has a protected hydroxy group. The compound may be subjected to a usual deprotection reaction with hydrochloric acid, sulfuric acid or the like in a solvent such as methanol, tetrahydrofuran, acetic acid or the like for a deprotection.

40 [0086] When tert-butyldimethylsilyl is used as a protective group, a compound which has hydroxy may be reacted with tert-butyldimethylsilyl chloride, tert-butyldimethylsilyl triflate or the like in a solvent such as dimethylformamide, acetonitrile, tetrahydrofuran, dimethylformamide, dichloromethane or the like in the presence of imidazole, triethylamine, 2, 6-lutidine or the like. For a deprotection reaction the protected compound may be reacted with tetrabutylammonium fluoride or the like in a solvent such as tetrahydrofuran or the like.

[55 [0087] Both of known compounds and the compounds which are produced by the following process may be used as the compounds (III) and (III') in the above scheme.

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[0088] Known compounds (VIII) and (IX), or (VIII') and (IX') wherein A and Z are groups which can be subjected to a coupling reaction by the Suzuki Reaction with each other; for example, one is borane such as dihydroxyborane, di(lower)alkoxyborane or the like and the other is halogen or  $-OSO_2(C_qF_{2q+1})$  wherein q is an integer of 0-4; D is a group other than halogen and  $-OSO_2(C_qF_{2q+1})$  wherein q is the same as defined above are reacted by the same method as above to obtain a compound (VII) or (VII').

[0089] As described above, instead of a compound which has borane, a compound which has -SiR<sup>17</sup><sub>3-r</sub>(Hal)<sub>r</sub> wherein R<sup>17</sup> is each independently lower alkyl Hal is halogen and r is an integer of 1-3, -SnR<sup>18</sup><sub>3</sub> wherein R<sup>18</sup> is each independently lower alkyl or - Zn(Hal) wherein Hal is halogen may be used for a reaction to obtain an objective compound.

[0090] Then, a substituent D is converted into a substituent A which is applicable to the Suzuki Reaction.

[0091] For example, a compound wherein D is hydrogen may be reacted with a halogenating agent such as bromine, chlorine, iodine, sulfuryl chloride, N-bromosuccinimide or the like in a suitable solvent such as acetic acid, chloroform, dichloromethane, carbon tetrachloride, water, acetic acid-sodium acetate or the like at - 20 °C or with heating for several minutes to several tens hours to give an objective compound wherein A is halogen.

[0092] A compound wherein D is protected hydroxy may be reacted with a trifluoromethanesulfonating agent such as trifluoromethanesulfonic anhydride, trifluoromethansulfonyl chloride or the like in a suitable solvent such as dichloromethane, chloroform, tetrahydrofuran or benzene in the presence of a base such as pyridine or triethylamine at -20 °C or with heating for several minutes to several tens hours to give an objective compound wherein A is OTf.

[0093] A compound of the present invention thus obtained can be converted into prodrug thereof. Any usual methods for conversion into a prodrug may be used. For example, hydroxy or amino which is attached a compound of the present invention at any position may be substituted with a usual group for a prodrug. An example of conversion into a prodrug

is a substitution of hydroxy with acyloxy substituted with carboxy, sulfo, amino, lower alkylamino or the like, phosphonoxy etc. A substitution of hydroxy for R<sup>1</sup> with -OCOCH<sub>2</sub>CH<sub>2</sub>COOH, -OCOCH=CHCOOH, -OCOCH<sub>2</sub>SO<sub>3</sub>H, -OPO<sub>3</sub>H<sub>2</sub>, -OCOCH<sub>2</sub>NMe<sub>2</sub>, -OCO-Pyr wherein Pyr is pyridine or the like is preferable.

[0094] A selective suppressor of the IgE production of the present invention comprises a compound which suppresses the IgE production in a process from a differentiation of a mature B cell into an antibody-producing cell to the production of an antibody and which does not suppress or weakly suppresses the production of the immunoglobulins IgG, IgM and/or IgA which are produced at the same time.

[0095] The term "suppresses the IgE production in a process from a differentiation of a mature B cell into an antibody-producing cell to the production of an antibody" means to suppress the IgE production by inhibiting one of the following processes.

- 1) A process wherein mature B cells are activated by various factors such as cytokines, i.e., IL-4, IL-5, etc., anti-CD40 antibody or the like,
- 2) A process wherein the activated B cells differentiate into antibody-producing cells such as plasma cells etc. (concretely, a process of switching of the activated B cells to IgE class antibody-producing cells) and/or

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3) A process wherein the antibody-producing cells produce immunoglobulins (specifically, a process of the IgE production)

[0096] An inhibition of "a process wherein a mature B cell is activated by various factors" in the process 1) does not include an inhibition of a process wherein the factors are produced from other cells and the like.

[0097] The term "suppresses the IgE production and does not suppress or weakly suppresses the production of the immunoglobulins IgG, IgM and/or IgA which are produced at the same time" means that the IgE production is suppressed enough to suppress allergy reactions and that the IgG, IgM and/or IgA production is not suppressed so potent as to badly affect an immune system concerning a living body protection under the condition that IgE and one or more of IgG, IgM and IgA can be produced at the same time. In other words,

[\*\* WARNING! MISSING DATA: <FLA>1<FLAC POS=MID>&cir;</FLAC></FLA> \*\*] The suppression of the IgE production is 5,000 times, preferably 10,000 times, more preferably 15,000 times, most preferably 20,000 times or more as potent as those of the IgG, IgM and/or IgA production and/or [\*\* WARNING! MISSING DATA: <FLA>2<FLAC POS=MID>&cir;</FLAC></FLA> \*\*] The IgG, IgM and/or IgA production is not suppressed to less than 50 % even at 5,000 times, preferably 10,000 times, more preferably 15,000 times, most preferably 20,000 times the concentration at which 50 % of the IgE production is suppressed as compared with that in the absence of the suppressor.

[0098] The term "the concentration at which 50 % of the IgE production is suppressed as compared with that in the absence of the suppressor" means a concentration at which the IgE production is limited to 50 % of the production in the absence or without administration of the selective suppressor of the IgE production of the present invention under the condition that the IgE can be produced. The suppressor is useful as a medicament when it has a selectivity for the IgE as compared with at least one of IgG, IgM or IgA, preferably with all of them.

[0099] The selective suppressor of the IgE production of the present invention suppresses 90 % or more of the IgE production as compared with that without administration of the suppressor at a dosage that the suppressor does not suppress or weakly suppresses the IgM, IgG and/or IgA production when the suppressor is administered to a mammal, which includes human, sensitized by an allergen. The term "allergen" means any substance that can induce the IgE production and an allergic reaction. Clinical examples are pollen, a acarid, house dust, albumin, milk, a soybean etc. and experimental examples are ovalbumin, bovine gamma globulin, bovine Serum albumin, an antigen protein of cedar pollen (Cryj I and Cryj II), an antigen protein for acarid (Derf I and Derf II) etc. The term "a dosage that the suppressor does not suppress or weakly suppresses the IgM, IgG and/or IgA production" means the dosage at which the suppression rate of the IgG, IgM and/or IgA is 10 % or less, preferably 5 % or less, more preferably 3 % or less as compared with those produced without administration of the selective suppressor of the IgE production of the present invention.

[0100] The selective suppressor of the IgE production of the present invention suppresses infiltration of an inflammatory cell to a tissue. The term "inflammatory cell" includes all of a lymphocyte, an eosinophil, a neutrophile and a macrophage, and an eosinophil and/or a neutrophile are preferable.

[0101] The effect of the selective suppressor on the IgE production of the present invention is potent for its direct action to B cells. Because the suppressor does not affect the humoral immunity concerning a biological protective reaction, it has many advantages, for example, little side effect such as infections etc.,

[0102] All of compounds that have the above effect are useful as an immunosuppressor regardless of the structure

and one of the examples is the compound (I) or (I") of the present invention.

[0103] The compounds of the present invention also include ones which have the suppressive effect on a mitogen reaction and/or a cytokine reaction.

[0104] Specifically, the compounds have a potent antiproliferative effect on T and/or B cells and/or a suppressive effect on the IL-5 and/or IL-4 production. They selectively suppress the IL-4 and/or IL-5 production and do not suppress the IL-2 production.

[0105] The immunosuppressor or anti-allergic agent of the present invention is useful for prevention or a treatment of allergic diseases such as a rejection symptom against a transplantation of an organ or a tissue, a graft-versus-host reaction which is caused by a bone marrow transplantation, atopic allergic diseases (for example, a bronchial asthma, an allergic rhinitis, an allergic dermatitis and the like), a hypereosinophils syndrome, an allergic conjunctivitis, a systemic lupus erythematosus, a polymyositis, a dermatomyositis, a scleriasis, MCTD, a chronic rheumatoid arthritis, an inflammatory bowel disease, an injury caused by ischemia-reperfusion, a pollenosis, an allergic rhinitis, an urticaria, a psoriasis and the like.

[0106] When the compound of the present invention is administered as a immunosuppressor and/or anti-allergic agent, it can safely be administered both orally and parenterally. In the case of an oral administration, it may be in any usual forms such as tablets, granules, powders, capsules, pills, solutions, suspensions, syrups, buccal tablets, sublingual tablets and the like for the administration. When the compound is parenterally administered, any usual forms are preferable, for example, injections such as intravenous injections and intramuscular injections, suppositories, endermic agents, vapors and the like. An oral administration is particularly preferable.

[0107] A pharmaceutical composition may be manufactured by mixing an effective amount of the compound of the present invention with various pharmaceutical ingredients suitable for the administration form, such as excipients, binders, moistening agents, disintegrators, lubricants, diluents and the like. When the composition is of an injection, an active ingredient can be sterilized with a suitable carrier to give a pharmaceutical composition.

[0108] Specifically, examples of the excipients include lactose, saccharose, glucose, starch, calcium carbonate, crystalline cellulose and the like, examples of the binders include methylcellulose, carboxymethylcellulose, hydroxypropylcellulose, gelatin, polyvinylpyrrolidone and the like, examples of the disintegrators include carboxymethylcellulose, sodium carboxymethylcellulose, starch, sodium alginate, agar, sodium lauryl sulfate and the like, and examples of the lubricants include talc, magnesium stearate, macrogol and the like. Cacao oil, macrogol, methyl cellulose and the like may be used as base materials of suppositories. When the composition is manufactured as solutions, emulsified injections or suspended injections, dissolving accelerators, suspending agents, emulsifiers, stabilizers, preservatives, isotonic agents and the like may be added. For an oral administration, sweetening agents, flavors and the like may be added.

[0109] Although a dosage of the compound of the present invention as an immunosuppressor and/or anti-allergic agent should be determined in consideration of the patient's age and body weight, the type and degree of diseases, the administration route or the like, a usual oral dosage for human adults is 0.05-100 mg/kg/day and the preferable dosage is 0.1 - 10 mg/kg/day. In the case that it is parenterally administered, although the dosage highly varies with administration routes, a usual dosage is 0.005 - 10 mg/kg/day, preferably, 0.01 - 1 mg/kg/day. The dosage may be administered in one or some separate administrations.

[0110] The present invention is further explained by the following Examples and Experiments, which are not intended to limit the scope of the present invention.

# **EXAMPLE**

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[0111] The abbreviations which are used in EXAMPLE mean the following.

Bn benzyl DME 1, 2-dimethoxyethane N, N-dimethylformamide **DMF DMSO** dimethylsulfoxide m-chloroperbenzoic acid **MCPBA** MOM methoxymethyl Ms methanesulfonyl Ру pyridyl **TBS** tert-butyldimethylsilyl

trifluoromethanesulfonyl

p-toluenesulfonyl

### Example 1 Synthesis of the comounds (I-1), (I-2) and (I-3)

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# (Step 1) Synthesis of the compound 1

[0113] To 300 ml of a solution of 10.63 g (22.08 mmol) of a compound (III-I) in 1, 2-dimethoxyethane was added 3.60 g (3.12 mmol) of tetrakis(triphenylphosphine)palladium (0) at room temperature. To the mixture were added 80 ml of a solution of a compound 2 (9.50 g; 26.5 mmol) in 99% ethanol and 125 ml (250 mmol) of an aqueous solution of 2 M sodium carbonate and the reacted suspension was heated under refluxing in an argon atmosphere for 6 hours. After cooling, the reaction mixture was filtered off to remove an insoluble material and the filtrate was acidified with 2 N hydrochloric acid and extracted with ethyl acetate. The extract was washed with 5 % aqueous solution of sodium bicarbonate and saturated brine successively, then dried and concentrated. After the residue was purified by silica gel chromatography (hexane-ethyl acetate 1:1), the obtained product was recrystallized from hexane-ethyl acetate to give the compound 1 (11.57 g; 87 % yield) as colorless crystals.

### (Step 2) Synthesis of the compound (I-2)

[0114] To 60 ml of a suspension of the compound 1 (9.30 g; 15.48 mmol) in anhydrous dichloromethane was added 3.24 ml (23.22 mmol) of triethylamine, followed by addition of 1.80 ml (23.22 mmol) of methanesulfonyl chloride under ice-cooling and stirred for 2 hours at the same temperature. After the solvent was removed, the residue was acidified with 80 ml of 1 N hydrochloric acid and extracted with chloroform. The extract was washed with 1 N hydrochloric acid, 5 % aqueous solution of sodium bicarbonate and saturated brine successively, and the obtained product was dried and concentrated. The obtained residue was recrystallized from hexane-ethyl acetate to give 9.93 g of the compound (1-2) (95 % yield) as colorless crystals.

### (Step 3) Synthesis of the compound 3

[0115] Stirred were 300 ml of a solution of 9.76 g (14.38 mmol) of the compound (1-2) and 765 mg (4.31 mmol) of palladium chloride (II) in 1, 4-dioxane under a hydrogen atmosphere at room temperature for 15 hours. An insoluble

material was removed off by filtration with celite and the obtained filtrate was concentrated. The residue was recrystallized from hexane-ethyl acetate to give the compound 3 (8.43 g; 100 % yield) as colorless crystals.

(Step 4) Synthesis of the compound (I-3)

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[0116] To 40 ml of a solution of the compound 3 (4.01 g; 6.81 mmol) in anhydrous N, N-dimethylformamide were added successive, 1.45 g (10.5 mmol) of potassium carbonate and 1.21 ml (10.5 mmol) of prenyl bromide. After the mixture was stirred under a nitrogen atmosphere for 15 hours at room temperature, the reaction mixture was poured into 230 ml of 6 % aqueous citric acid and extracted with ethyl acetate. The extract was washed with 5 % citric acid, 5 % aqueous solution of sodium bicarbonate and saturated brine successively, followed by being dried and concentrated. The residue was recrystallized from hexane-ethyl acetate to give 4.01 g of the compound (I-3) (90% yield) as colorless crystals.

(Step 5) Synthesis of the compound (I-1)

[0117] To 38 ml of a solution of 3.80 g (5.79 mmol) of the compound (I-3) in dimethylsulfoxide was added 15 ml (60.0 mmol) of 4 N sodium hydroxide and the reaction mixture was warmed at 60 °C for 4 hours. After the mixture was cooled, 100 ml of 1 N hydrochloric acid was added to it and the obtained mixture was extracted with ethyl acetate. The extract was washed with 5 % aqueous solution of sodium bicarbonate and saturated brine successively, then dried and concentrated. The residue was recrystallized from methanol to give 1.72 g of the compound (I-1) (70 % yield) as colorless crystals.

Reference Example 1 Synthesis of the compound 2

[0119] To a solution of the compound 4 (80.0 g; 0.287 mol) in 300 ml of N, N-dimethylformamide were added tert-butyldimethylsilyl chloride (45.87 g; 0.296 mol) and imidazole (21.46 g; 0.315 mol) and stirred at room temperature for 19 hours. The reaction mixture was poured into 1 L of water and extracted with ether. The extract was washed with water and saturated brine successively and then dried and concentrated. The residue was purified by silica gel chromatography (hexane-ethyl acetate 50:1) to give the compound 5 (97.20 g; 86 % yield) as a colorless oil.

[0120] To 850 ml of a solution of the compound 5 (97.20 g; 0.247 mol) in annydrous tetrahydrofuran was added 152 ml (0.252 mol) of a solution of 1.66 N n-butyllithium in hexane under a nitrogen atmosphere at -70 °C and stirred at the same temperature for 1.5 hours. To the mixture was added 171 ml (0.741 mol) of triisopropyl borate at - 70 °C and stirred for 3 hours with gradually warming to room temperature. Under cooling with ice, 500 ml of water and 320 ml of 5% citric acid were added to the mixture and stirred at the same temperature for 30 minutes. The solution was extracted with ethyl acetate and the extract was washed with water and saturated brine successively, then dried and concentrated. The residue was purified by silica gel chromatography (hexane-ethyl acetate 2:1) to give the compound 2 (51.10 g; 58 % yield) as colorless crystals.

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### Reference Example 2 Synthesis of the compound (III-1)

## (Step 1) Synthesis of the compound 8

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[0122] To a solution of 15.30 g (62.4 mmol) of a compound 7 (Journal of Chemical Society, 1925, 1998) in 300 ml of 1, 2-dimethoxyethane was added 3.60 g (3.12 mmol) of tetrakis(triphenylphosphine)palladium (0) at room temperature. To the mixture were added a solution of 18.89 g (74.9 mmol) of a compound 6 (GB-A No. 2276162) in 80 ml of 99 % ethanol and 125 ml (250 mmol) of an aqueous solution of 2 M sodium carbonate and the reaction suspension was heated under refluxing in an argon atmosphere for 6 hours. After cooling, the reaction mixture was filtered off to remove an insoluble substance. The filtrate was acidified with 2 N hydrochloric acid and extracted with ethyl acetate. The extract was washed with 5 % aqueous solution of sodium bicarbonate and saturated brine successively, then dried and concentrated. The residue was purified by silica gel chromatography (hexane-ethylacetate 1:1) and recrystallized from hexane-ethylacetate to give the compound 8 (15.68 g; 97 % yield) as colorless crystals.

# (Step 2) Synthesis of the compound 9

[0123] To a suspension of the compound 8 (15.34 g; 59.39 mmol) in 240 ml of anhydrous dichloromethane were added 16.6 ml (118.8 mmol) of triethylamine and 6.93 ml (89.09 mmol) of methanesulfonyl chloride under ice-cooling and stirred at the same temperature for 2 hours. After the solvent was removed, the residue was acidified with 1 N hydrochloric acid (100 ml) and extracted with ethyl acetate. The extract was washed with 1 N hydrochloric acid, 5 % aqueous solution of sodium bicarbonate and saturated brine successively, then dried and concentrated. The residue was recrystallized from hexane-ethyl acetate to give the compound 9 (17.24 g; 86 % yield) as colorless crystals.

### (Step 3) Synthesis of the compound (III-24)

[0124] To 210 ml of a suspension of the compound 9 (17.03 g; 50.63 mmol) in acetic acid were added 6.23 g (75.95 mmol) of sodium acetate and 3.91 ml (75.95 mmol) of bromine at room temperature and stirred at the same temperature for 16 hours. After 3.91 ml (75.95 mmol) of bromine was added to the reacted suspension and stirred at 50 °C for 4 hours, 3.91 ml (75.95 mmol) of bromine was added and stirred at 50 °C for 3 hours. The reaction mixture was poured into 1 L of 1 M aqueous sodium thiosulfate and stirred for 30 minutes. The precipitate was collected by filtration and washed with water. The obtained crystals were dissolved in 800 ml of chloroform, washed with 5 % aqueous solution of sodium bicarbonate and saturated brine successively, then dried and concentrated. The residue was recrystallized

from hexane-ethyl acetate to give the compound (III-24) (18.12 g; 86 % yield) as colorless crystals.

(Step 4) Synthesis of the compound 10

[0125] To a suspension of the compound (III-24) (15.80 g; 38.05 mmol) in 400 ml of 1, 2-dichloroethane was added 12.30 g (57.05 mmol) of 80 % m-chloroperoxybenzoic acid at room temperature and stirred at the same temperature for 17 hours. The reaction mixture was poured into 360 ml of 0.2 M aqueous sodium thiosulfate and extracted with chloroform. The extract was washed with 300 ml of 0.2 M sodium thiosulfate and 200 ml of 5 % of sodium bicarbonate (× 2) successively, then dried and concentrated. The residue (15.80 g) was dissolved in 330 ml of 1, 2-dimethoxyethane and 30 ml (120 mmol) of 4 N hydrochloric acid was added. After the reaction mixture was stirred at 50 °C for 12 hours and cooled, the solvent was removed and the residue was extracted with ethyl acetate. The extract was washed with 5 % aqueous solution of sodium bicarbonate and saturated brine successively, then dried and concentrated to give the compound 10 (14.35 g; 97 % yield) as pale brown crystals.

(Step 5) Synthesis of the compound (III-1)

[0126] Using an analogous procedure for the compound (I-4), 12.63 g of the compound (III-1) as colorless crystals (88 % yield) was obtained from the compound 10 (12.0 g; 29.76 mmol).

Example 2 Synthesis of the compound (I-4)

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(Step 1) Synthesis of the compound 11

[0128] To a solution of 816 mg (2 mmol) of a compound (III-2) in 40 ml of 1, 4-dioxane were added 114 mg (0.1 mmol) of tetrakis(triphenylphosphine)palladium (0), 748 mg (2.09 mmol) of the compound 2 and 589 mg (2.77 mmol) of powders of anhydrous potassium phosphate at room temperature and heated in a nitrogen atmosphere at 85 °C for 23 hours. The reaction mixture was cooled and extracted with ethyl acetate. The extract was washed with 2 N hydrochloric acid, 5 % aqueous sodium bicarbonate and saturated brine successively, then dried and concentrated. The residue was purified by silica gel chromatography (hexane-ethyl acetate 4:1) and crystallized from pentane to give the compound 11 (745 mg; 67 % yield) as pale yellow crystals.

(Step 2) Synthesis of the compound (I-4)

[0129] To a solution of the compound 11 (557 mg; 1 mmol) in 10 ml of dichloromethane was added 259 mg (1.2 mmol) of 80 % m-chloroperbeuzoic acid at room temperature and stirred for 15 hours. The reaction mixture was poured into 0.1 M aqueous sodium thiosulflate and extracted with ethyl acetate. The extract was washed with 0.1 M aqueous sodium thiosulflate, 5 % aqueous sodium bicarbonate and saturated brine successively, then dried and concentrated. To a solution of 650 mg of the obtained residue in 5 ml of methanol was added a solution of 1 M sodium methoxide in 2 ml of methanol under ice-cooling and stirred for 30 minutes. After the reacted solution was acidified with 2 N hydro-

chloric acid and extracted with ethyl acetate, the extract was washed with saturated brine, then dried and concentrated. To a solution of 647 mg of the obtained residue in 10 ml of tetrahydrofuran was added 2 ml of 1 M tetrabutylammonium fluoride in tetrahydrofuran under ice-cooling and stirred for 30 minutes. The obtained reaction mixture was poured into 2 N aqueous hydrochloric acid under ice-cooling to acidiiy and extracted with ethyl acetate. The ethyl acetate layer was washed with water, 5 % aqueous sodium bicarbonate and saturated brine successively, then dried and concentrated. The residue was purified by silica gel chromatography (hexane-ethyl acetate 2:1) to give 275 mg of the compound (I-4) (62 % yield) as powders.

# Reference Example 3 Synthesis of the compound (III-2)

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# (Step 1) Synthesis of the compound 13

[0131] To 26 ml of a solution of 2.61 g (10 mmol) of a compound 12 (Journal of Organic Chemistry, 1987, 52, 4485) in dimethylformamide were added 400 mg (10 mmol) of 60 % sodium hydride dispersion in oil and 836 mg (11 mmol) of chloromethyl methyl ether under ice-cooling and stirred for 30 minutes. After warming to room temperature, it was further stirred for 1 hours. The reaction mixture was concentrated under reduced pressure and extracted with ethyl acetate. The extract was washed with 5 % aqueous solution of sodium bicarbonate and saturated brine successively, then dried and concentrated. The residue was recrystallized from ethyl acetate-hexane-pentane to give the compound 13 (2.8 g; 92 % yield).

# (Step 2) Synthesis of the compound 14

[0132] Using an analogous procedure for the compound 8, the compound 14 was obtained as a pale yellow oil (96 % yield) from the compound 13 and the compound 15 (Tokyo Kasei Kogyo Co., Ltd.).

# (Step 3) Synthesis of the compound 16

[0133] To 16 ml of a suspension of 1.38 g (4.3 mmol) of the compound 14 in methanol was added 4 ml of 2 N aqueous hydrochloric acid and stirred for 1 hour under warming at 60 °C. The reaction mixture was concentrated under reduced pressure and extracted with ethyl acetate. The extract was washed with 5 % aqueous sodium bicarbonate and saturated brine successively, then dried and concentrated to give the compound 16 (1.12 g; 94 % yield) as a yellow crystal-line residue.

### (Step 4) Synthesis of the compound (III-2)

[0134] To 12 ml of a solution of the compound 16 (1.12 g; 4.05 mmol) in anhydrous dichloromethane was added 1.02 ml (6.08 mmol) of triluoromethanesulfonic anhydride and then 980 ml (12.2 mmol) of pyridine under ice-cooling and stirred for 30 minutes. The reaction mixture was allowed to warm to room temperature and stirred for additional 2 hours and the solvent was removed. The residue was extracted with ethyl acetate, washed with 5 % aqueous sodium bicarbonate and saturated brine successively, then dried and-concentrated. The obtained crude product was purified by sil-

ica gel chromatography to give 1.23 g of the compound (III-2) (74 % yield) as a white crystalline residue.

# Example 3 Synthesis of the compounds (I-5), (I-6) and (I-7)

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# (Step 1) Synthesis of the compound (I-5)

[0136] Using an analogous procedure for the compound 1 in Example 1, 634 mg (0.972 mmol) of the compound (I-5) was synthesized from 881 mg (1.50 mmol) of the compound (III-11) and 370 mg (1.95 mmol) of 3-trifluoromethyl boric acid. 65 % yield.

# (Step 2) Synthesis of the compound 18

[0137] Using an analogous procedure for the compound 3 in Example 1, the compound 18 (360 mg; 0.640 mmol) was synthesized from 433 mg (0.664 mmol) of the compound (I-5). 96 % yield.

# (Step 3) Synthesis of the compound (I-6)

[0138] Using an analogous procedure for the compound (I-3) in Example 1, 185 mg (0.293 mmol) of the compound (I-6) was synthesized from the compound 18 (170 mg; 0.302 mmol). 97 % yield.

# (Step 4) Synthesis of the compound (I-7)

[0139] Using an analogous procedure for the compound (I-1) in Example 1, 85 mg (0.179 mmol) of the compound (I-7) was synthesized from 150 mg (0.238 mmol) of the compound (I-6). 75% yield.

# Reference Example 4 Synthesis of the compound (III-11)

(Step 1) Synthesis of the compound 19

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[0141] Using an analogous procedure for the compound 10 in Reference Example 2, the compound 19 (24.04 g; 103 mmol) was synthesized from the compound 7 (40.03 g; 163 mmol). 63 % yield.

(Step 2) Synthesis of the compound 20

[0142] To a solution of tert-butylamine (5.0 ml; 47.8 mmol) in 10 ml of toluene was added iodine (5.94 g; 23.39 mmol) under a nitrogen atmosphere and stirred for 50 minutes at room temperature. The compound 19 (5.46 g; 23.43 mmol) was added to the solution under ice-cooling, then warmed to room temperature and stirred for 6 days. The reaction mixture was poured into 1 M of aqueous sodium thiosulfate and extracted with ethyl acetate. The extract was washed with 1 M aqueous sodium thiosulfate and saturated brine successively, then dried and concentrated to give the compound 20 (8.30 g; 23.16 mmol). 99 % yield.

(Step 3) Synthesis of the compound 21

[0143] Using an analogous procedure for the compound 1 in Example 1, the compound 21 (2.10 g: 4.87 mmol) was synthesized from the compound 20 (8.70g; 24.20 mmol). 20 % yield.

(Step 4) Synthesis of the compound (III-11)

[0144] Using an analogous procedure for the compound (I-2) in Example 1, 2.61 g (4.44 mmol) of the compound (III-11) was synthesized from the compound 21 (3.20 g: 7.42 mmol). 60 % yield.

# Example 4 Synthesis of the compound (I-9)

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(Step 1) Synthesis of the compound 22

[0146] Using an analogous procedure described in Reference Example 1, 1.53 g (3.63 mmol) of the compound (I-1) was silylated and the obtained crude product was crystallized from methanol to obtain the compound 22 (2.62 g; 95 % vield) as colorless crystals.

**I-9** 

(Step 2) Synthesis of the compound 23

[0147] To a solution of the compound 22 (2.38 g; 3.1 mmol) in 90 ml of acetone were added 415 mg (3.74 mmol) of trimethylamine-N-oxide dihydrate and 1.60 ml of 5 % aqueous solution of osmium tetroxide (0.3 mmol) and stirred for 1 hour at room temperature. After 20 ml of water was added to the reaction mixture, 4.0 g of sodium bicarbonate and 4.0 g of sodium bisulfite were added and stirred for 30 minutes. The reaction mixture was concentrated under reduced pressure and the residue was extracted with ethyl acetate. The extract was washed with saturated brine, then dried and concentrated.

[0148] A solution of 1.96 g (9.16 mmol) of sodium periodate in 33 ml of water was added dropwise to a solution of 2.46 g of the residue obtained by the above method in 90 ml of ethanol with stirring at room temperature. After stirring for 2 hours, 100 ml of water was added to the reaction mixture and the precipitate was collected by filtration and dried to give the compound 23 (1.98 g; 87 % yield) as powder.

45 (Step 3) Synthesis of the compound (I-9)

[0149] To a suspension of 146 mg (0.38 mmol) of n-propyltriphenylphosphonium bromide in 2.5 ml of anhydrous tetrahydrofuran was added 32 mg (0.29 mmol) of potassium tert-butoxide in a nitrogen atmosphere at 0 °C and stirred at the same temperature for 1 hour. The reaction mixture was cooled to -78 °C, a solution of the compound 23 (70 mg; 0.095 mmol) in 1.5 ml of anhydrous tetrahydrofuran was added and stirred for 30 minutes at the same temperature and for additional 1 hour at room temperature. The reaction mixture was poured into an ice-cooling aqueous solution of saturated ammonium chloride and extracted with ethyl acetate. The extract was washed with saturated brine, then dried and concentrated.

[0150] Using an analogous procedure described in Example 2 Step 2, 70 mg of the residue obtained by the above method was desilylated and the obtained crude product was purified by silica gel chromatography (toluene-ethyl acetate 4:1) to give 37 mg of the compound (I-9) as pale yellow crystals.

# Example 5 Synthesis of the compound (I-565)

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# (Step 1) Synthesis of the compound (I-563)

Using an analogous procedure for the compound 2 in Example 1, 850 mg of the compound (I-563) was obtained from a compound (III-27) (800 mg; 1.59 mmol) and the compound 2 (1.25 g; 3.50 mmol) as colorless crystals (86 % yield).

# (Step 2) Synthesis of the compound (I-565)

[0153] To a solution of 120 mg (0.193 mmol) of the compound (I-563) in 3 ml dimethoxyethane and 1 ml of ethyl acetate was added 2.4 ml of 4 N hydrochloric acid at 40 °C and stirred at the same temperature for 2 hours 20 minutes. After cooling, the reaction mixture was neutralized with aqueous solution of saturated sodium bicarbonate and extracted with ethyl acetate. The extract was washed with saturated aqueous solution of sodium bicarbonate and saturate brine, then dried and concentrated. The obtained crude product was crystallized from hexane-ethyl acetate to give 93 mg of the compound (I-565) as pale yellow crystals (92 % yield).

### 35 Reference Example 5 Synthesis of the compound (III-27)

# (Step 1) Synthesis of the compound 24

[0155] In a mixture of 17.5 ml of tert-butanol and 5.3 ml of 2-methyl-2-butene was suspended 415 mg (1.00 mmol) of the compound (III-24), 6.7 ml of aqueous solution of 724 mg (8.00 mmol) of sodium chlorite and 968 mg (6.20 mmol) of sodium dihydrogen phosphate dihydrate was added and stirred at the same temperature for 4 hours 30 minutes. The solution of 1 M sodium thiosulfate was added to the reaction mixture and the mixture was extracted with ethyl acetate.

Then, organic layer was extracted with aqueous solution of saturated sodium bicarbonate. Then the aqueous layer was acidified with conc. hydrochloric acid and extracted with ethyl acetate. The extract was washed with saturated brine, then dried and concentrated to give the compound 24 (384 mg; 89 % yield) as colorless crystals.

# (Step 2) Synthesis of the compound (III-27)

[0156] To 10 ml of a suspension of the compound 24 (1.50 g; 3.48 mmol) in tert-butanol were added 0.533 ml (3.83 mmol) of triethylamine, followed by 0.825 ml (3.83 ml) of diphenyl phosphate azide, and the mixture was stirred at 100 °C for 23 hours. After the reaction mixture was cooled, water was added to it and the mixture was extracted with ethyl acetate. The extract was washed with saturated aqueous solution of sodium bicarbonate and saturated brine, then dried and concentrated. The residue was purified by silica gel chromatography (hexane-ethyl acetate 2.5:1) to give 1.43 g of the compound (III-27) as colorless form product (82 % yield).

# Example 6 Synthesis of the compound (I-480)

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# [0158] To a solution of 120 mg of a compound which was eliminated a Boc group of the compound (I-479) in 2 ml of tetrahydrofuran and 0.5 ml of methanol were added 33 ml (0.34 mmol) of 3-methyl-2-butenal and 90 ml (0.26 mmol) of 3 M aqueous solution of sulfuric acid at 0 °C and stirred for 10 minutes. Further, 19.6 mg of sodium borohydride was added in small portions to the mixture and stirred at room temperature for 1 hour. The saturated aqueous solution of sodium bicarbonate was added to the reaction mixture and extracted with ethyl acetate. The extract was washed with saturated brine, then dried and concentrated. The residue was purified by silica gel chromatography (hexane-ethyl acetate 3:1) to give 98 mg of the compound (I-480) as colorless crystals (78 % yield).

### 35 Example 7 Synthesis of the compound (I-628)

[0160] Using an analogous procedure for the compound 1 in Example 1, 1.2 g (2 mmol) of the compound (III-44) was reacted with 551 mg (2.2 mmol) of 4-bromomethanesulfonyl anilide were reacted, followed by desilylated by an analogous procedure described in Example 1 Step 2. The obtained crude product was crystallized from ethyl acetate-hexane to obtain 760 mg of the compound (I-628) as pale yellow crystals (73 % yield).

# Reference Example 6 Synthesis of the compound (III-44)

# 20 (Step 1) Synthesis of the compound 25

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[0162] Using an analogous procedure for the compound 5 in Reference Example 1, a crude product was synthesized by the reaction of 22.2 g (52.7 mmol) of the compound 21, 8.95 g (132 mmol) of imidazole and 17.5 g (1.16 mmol) of tert-butyldimethylsilyl chloride. The obtained product was purified by silica gel chromatography (ethyl acetate:hexane=1:20) and crystallized from ethyl acetate-hexane to give 29.7 g of the compound 25 as colorless crystals (85% yield).

# (Step 2) Synthesis of the compound (III-44)

[0163] Using an analogous procedure for the compound 2 in Reference Example 1, 402.7 g (610 mmol) of the compound 25 was reacted with 678 ml (814 mmol) of 1.08 N s-butyl lithium in cyclohexane, followed by addition of 282 ml (1.22 mol) of triisopropyl borate to give 246 g of the compound (III-44) as colorless powders (65 % yield).

# Example 8 Synthesis of the compound (I-233)

[0165] In an argon atmosphere, 2.87 g (8.0 mmol) of the compound 20 was dissolved in 32 ml of dimethoxyethane and 8 ml of ethanol, 3.01 g of the compound 2 and 16 ml of 2 M aqueous solution of sodium carbonate were added and the reaction mixture was degassed. To the mixture was added 462 mg (0.4 mmol) of palladium tetrakistriphenylphosphine and the mixture was heated under refluxing for 2 hours. After the reaction mixture was cooled to room temperature, 2.02 g (12.0 mmol) of 4-methylthiophenyl boronic acid, 462 mg (0.4 mmol) of palladium tetrakistriphenylphosphine, 16 ml of 2 M aqueous solution of sodium carbonate, 32 ml of dimethoxyethane and 8 ml of

ethanol were added to it. Then, the reaction mixture was degassed again and heated under refluxing for 16 hours. After the reaction mixture was cooled to room temperature, 100 ml of 5 % aqueous citric acid was added and stirred at the same temperature for 1 hour. Ethyl acetate was added to the reaction mixture and the organic layer was washed with 5 % aqueous citric acid, water, saturated aqueous solution of sodium bicarbonate and saturated brine successively, then dried and concentrated. The residue was purified by silica gel chromatography (hexane-ethyl acetate 3:1) to obtain 2.13 g of crude crystals. The obtained crude crystals were recrystallized from hexane-ethyl acetate to give 1.66 g of the compound (I-233) as colorless crystals (44 % yield)

# Example 9 Synthesis of other compounds

[0166] Following compounds (I) were synthesized by analogous procedures described above. The structures and physical constants of the compounds (III) and (I) are as follows.

OMe

5	III-1 MsO————————————————————————————————————	III-12 MeO OMOM OMe
	III-2 F————————————————————————————————————	III-13 MsO————————————————————————————————————
	III-3 MsO————————————————————————————————————	III-14 MeO———Br
15 	III-4 MsO————————————————————————————————————	III-15 Me <sub>2</sub> N OMe  OTf  MeO CHO
20	III-5 MsO OMs	OMe  III-16 F <sub>3</sub> C — Br  MeO OMs  OMe
25	III-6 HO————————Br OMe	III-17 Mso————————————————————————————————————
30	III-7 O O O O O O O O O O O O O O O O O O O	III-18 MsO————————————————————————————————————
	III-8 MsO————————————————————————————————————	III-19 MsO-S-Br
<b>35</b>	III-9 MsO-C	F OMe III-20 HO Br MeO OH
40	OMe III-10  MeO OMe	III-21 MeO — Br
<b>4</b> 5	III-11 Br OBn MeO OMs OMs	III-22 MeO O OHOOH

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OMe III-23 MsO————————————————————————————————————	OMe OBn MeO OMs OTBS
OMe  III-24 MsO — Br  MeO CHO	III-35 Br OMe OMs F
III-25 MsO — Br MeO CH <sub>2</sub> OH	OMe OBn MeO OMOM OTBS
III-26 MeO Br	OMe OBn MeO OH
OH OMe III-27 MsO F MeO NHBoc	III-38 TfO OMe OMs
III-28 P————————————————————————————————————	III-39 TfO————————————————————————————————————
MeO OMe	III-40 Tro-OMOM
III-30 OMe MeO <sub>2</sub> C OTf	III-41 Tro————————————————————————————————————
III-31 NC OMe  - MeO OMe	III-42 Tro-OME O2 N N N N N N N N N N N N N N N N N N
III-32 O <sub>2</sub> N————————————————————————————————————	OHC OMe  III-43 TrO OMe  OMe  OMe
III-33 M <sub>SO</sub> OTf	III-44 (HO) <sub>2</sub> B OTBS OTBS

5	III-45	MsO OH	Ш-56	MsQ OMe HO—Br MeO
10	ш-46	MsO—————Br MeO CH <sub>2</sub> OH	ш-57	HO——————Br MeO
	Ш-47	HO————————————————————————————————————	III-58	HO-CHO OHC
	Ш-48 .	HO—————Br EtO OH	ш-59	MsO—Br EtO OMs
20	III-49	HO—TBSO—Br	III-60	MsO-We Br
25	Ш-50	MsO————————————————————————————————————	III-61	MsO-CHO  MeO OMe
30	Ш-51	MsO — Br MeO OH	Ш-62	MOMOH <sub>2</sub> C————————————————————————————————————
35	Ш-52	MsO————Br	ш-63	MsO—OMe Me
40	Ш-53	MsO OMe OMs	Ш-64	HO-CI-OTI
45	III-54	MsO————————————————————————————————————	Ш-65	OMe B(OH) <sub>2</sub>
50	ІП-55	HO————Br EtO OH	III-66	TBSO—B(OH) <sub>2</sub> MeO

## EP 0 933 346 A1

	Me	Me
III-67	TBSO-()B(OH)2	III-77 Br—OBn
	Me OMe	Me
III-68	Me <sub>2</sub> N-B(OH) <sub>2</sub>	Me III-78 TfO—
22 40	MeO MeO	III-78 TfO-\OBn
	™e	
III-69	Me <sub>2</sub> N-()-B(OH) <sub>2</sub>	III-79 TfO—(T)—OBn
	Mé TBSQ OMe	Me F
III-70	Me <sub>2</sub> N-B(OH) <sub>2</sub>	III-80 Tro
111-70	MeO	CI OMe
	Me /=\	Me
Ш-71	Br—	III-81 TfO-
	Me OMe	Me OMs OMs
	NMe <sub>2</sub>	Me
111-72	Br——————	III-82 Tro-
	Me <sub>2</sub> N OH	MeÓ F Me ∕≕
ПІ-73	Br-(=)-0	III-83 TrO-
11-75	Me OH	MeO OMe
	Et /=\	Me A
Ш-74	Br—(T)—O	III-84 TfO-
	Ei OH	MeO F
	Me —	Me
Ш-75	- Br—()—()	III-85 (HO) <sub>2</sub> B
	MeÓ ÒH ÒMe	Me OMe
	Me — —	Me
III-76	Br O	III-86 (HO) <sub>2</sub> B
	MeÖ ÖH ÖH	Me F

5	-1 HO	MeO O OMs
	I-2 MsO OMS OMS   I-15 MsO OMS	OMe
10	I-3 MsO-OMs OMs I-16 HO-	Me <sub>2</sub> N OMe
15	I-4 F————————————————————————————————————	MeÓ ►O ÒH  Me₂N  OMe
20	I-5 F <sub>3</sub> C MeO OMs OMs I-18 HO-	MeÓ OMs F OMe
	I-6 F <sub>3</sub> C MeO OMs OMs I-19 MsO—	Med OH F
<b>25</b>	I-7 F <sub>3</sub> C MeO OH OH I-20 MsO-	Med OMs OH
30	I-8 MsO CO <sub>2</sub> H I-21 MsO OH	MeO OMS OMS F OME MeO OMS OMS
35	I-9 HO OH OH I-22 HO	F OMe
	I-10 MsO————————————————————————————————————	MeO OMs CH <sub>2</sub> OH
40	I-11 MsO————————————————————————————————————	OMe OMs Me
45	I-12 HO CH₂OH OH I-25 HO OMe CH₂OH OH I-25 HO OME	OMe
50	I-13 MsO — O OH Me <sub>2</sub> N OH	MeÖ ÖH Me

1-26 HO	I-39 HO
I-27 MsO	Med OH OH OMe Hell Ho
I-28 MsO	MeO OH OH OH OH
I-29 HO-{\bigcrup-\bi	MeO OH OH OMe Br
I-30 MsO OMs OMs	HeO OMs OMs OMe Br
I-31 HO	HeO OH OH OH OME
I-32 MsO OMs OMs	I-44 MsO————————————————————————————————————
I-33 HO MeO OH OH	H-45 HO OH OH OH OMe
I-34 MsO—OMs OMs	I-46 HO OH OH OMe
I-35 HO OH OH	MeO OH OH OMe
I-36 MsO OMs OMs	I-48 HO OH OH OH
I-37 но————————————————————————————————————	I-49 HO-WHO OH OH OME OME
I-38 MsO OMs OMs	I-50 HO MeO OH OH

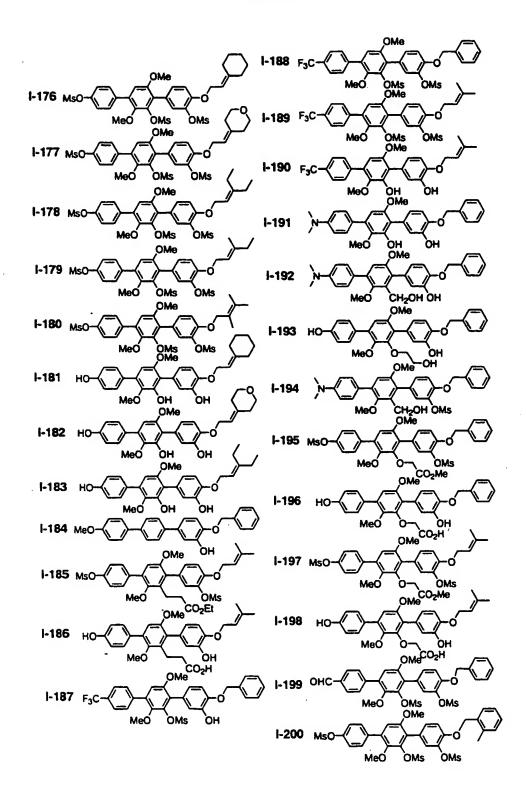
			,	I-63 HO OMe
5	i-51	но-С	OMe	
		MeÓ	OH OH	I-64 MSO OME STI
10	1-52	MsO————————————————————————————————————	OMs OMs	MsO OMe
	I-53	но-{	OMe ————————————————————————————————————	1-65 OMs
15		MeO	OH O-{	I-66 OMe
	l-54	HO————————————————————————————————————	OMs OH .	MsO OMe
20	I-55	но-{	OMe ————————————————————————————————————	I-67 HO OMS OME
		MeO	OH OH	I-68 MsO
25	I-56	HO-(	он он	MeO OH OMe
	I-57	F-(	OMe	MeO OMs
30			OMs OMs OMe	I-70 MsO OMs
	1-58	MeO	OMs OMs	I-71 HO
35	1-59	F-()	OMe -	MeO OH OMe
40	1.00	MeÓ ∕≕∖ ∕≕	ÖH ÖH OMe -≺	MeO OMe F
40	I-60	MeO	он он	1-73 HO — — — — — — — — — — — — — — — — — —
45	i-61		OMe	1-74 MsO
	I-62	MeÓ	OMS OMS OME	1-75 MsO OMS OH
		MeO	ОН ОН	OMS OMS

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	<b>&gt;</b>	OMe
I-76	MsO-()-()-()-()-()-()-()-()-()-()-()-()-()-	1-89 но- — — — — — — — — — — — — — — — — — — —
I-77	но-Он он	I-90 MsO OMs F
I-78	MeO OMe OH	I-91 MOMO — OMOM OMOM
1-79	MeO OMs	I-92 MeO
I-80		MeO O OH OH OMe
I-81	MeO OMs OMe	I-93 HO OH OH
	MeO OH OME	I-94 но-
I-82		MeO OH OH OMe //
1-83	MeO OCH <sub>2</sub> CO <sub>2</sub> Et	I-95 HO OH OH
I-84	MeO OMs CHO OMe  MsO OMs  MeO OMs	I-96 HO OH OH
1-85	MsO-OMe CO <sub>2</sub> Et	I-97 MsO-OMS OMS OMS
I-86	MeO OH CO <sub>2</sub> EI	I-98 MsO OMs OMs
I-87	HO OME CH <sub>2</sub> I	1-99 MsO OMS OMS
1-88	MeO OMe OMs	I-100 MsO OMs OMs OMs
	MeÓ OMs OCOPh	•

		OMe CI		OMe
5	F101 HO		I-114 HO————————————————————————————————————	OH OH
	MeÓ	ÒH ÒH OMe //		OMe
	I-102 HO-	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	I-115 HO	
10		он он	MeO	OH OH
	I-103 HO-√	OMeBr	I-116 HO	>~\\\_\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
	ہر ت	OH OH	MeO	OH OH
15		OMe /_CI	I-117 HO-	OMe
	I-104 HO-	<b>├</b>	MeO	он он
		OH OH Br		OMe N
20	I-105 HO-	~~~~	I-118 HO-	
		он он	MeO	OMe /=
	I-106 но-{	OMe ————	I-119 HO	<b>}-{</b> }- <b>6</b>
25		Me OH	MeÓ	OH OH
		OMe (	I-120 HO-	~~~~
	I-107 MeO		MeO	он он сі
30	MeÓ Ì	OMOM OH	I-121 HO-	OMe CI
	I-108 MsO-	<b>\_</b> \_\"	MeO	он он
	MeO	OMs OMs CI.	<b>~ ~</b>	OMe
<b>35</b>	I-109 MsO-	OMe	I-122Ms0-	
	MeO MeO	OMs OMs	MeÓ	OMs OH
	<b>(5) (5)</b>	OMS OMS OME	I-123 Mso ( )	<del>}_</del>
40	I-110 MsO		MeÓ	CO₂H OMs
	MeÓ	OMs OMs	I-124 HO	OMe
	I-111 MsO		MeO	CO⁵H OH
45	MeÓ	OMs OMs		OMe
	I-112 MsO		I-125 MsO-	
	MeO	OMs OMs	MeÓ	CO₂Me OMs
50	I-113 MsO-	OMe N		
	MeO	OMs OMs		

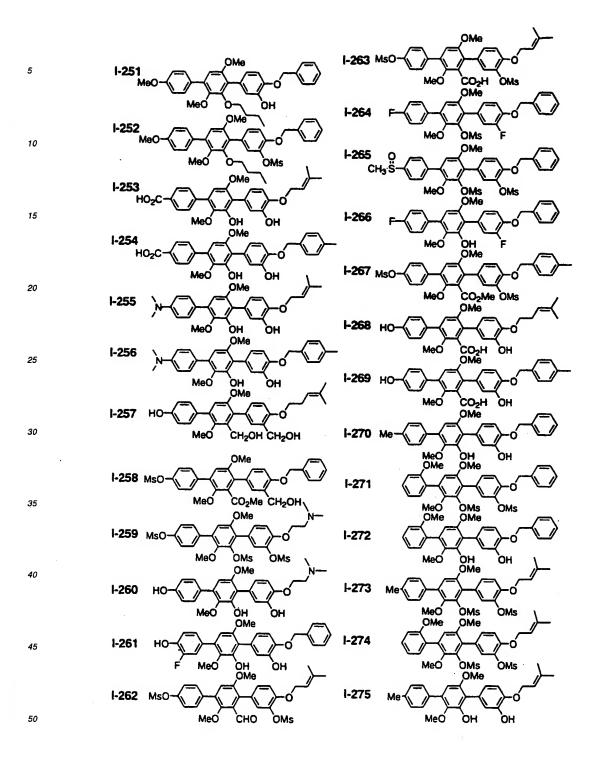
5	OMe OH CH <sub>2</sub> OH	I-164 MsO OMOM OMS
10	I-152 OMEO CHO OH	I-165 HO OMOM OH
,,	I-153 HO OH OH	I-166 MsO OH OMs
15	I-154 MsO OMe OMs OMs	I-167 MsO
20	I-155 HO OH OME OMS	MeO 0 OMs OMe
or.	I-156 MsO OMs OH	MeO O OH OMe
25	I-157 MsO OMS OMS	MeO O → OMS OMe
30	I-158 MsO OMS OMS	MeO O— OH .
35	I-159 MsO OMS OMS OMS OMS OMS OMS OMS OMS OMS OCH <sub>2</sub> CO <sub>2</sub> Me OMS	MeO OMs OMs OMs OMs OMs
	I-160 HO OH OCH <sub>2</sub> CO <sub>2</sub> H	H-172 HO MeO OH OH OH OMe
40	I-161 MsO	I-173 HO MeO OH OH OMe
45	MeÓ OMs OCH <sub>2</sub> CO <sub>2</sub> Me OMe I-162 HO	I-174 HO
50	MeO OH OCH <sub>2</sub> CO <sub>2</sub> H OMe OMe MeO OMOM OH	I-175 HO OH OH

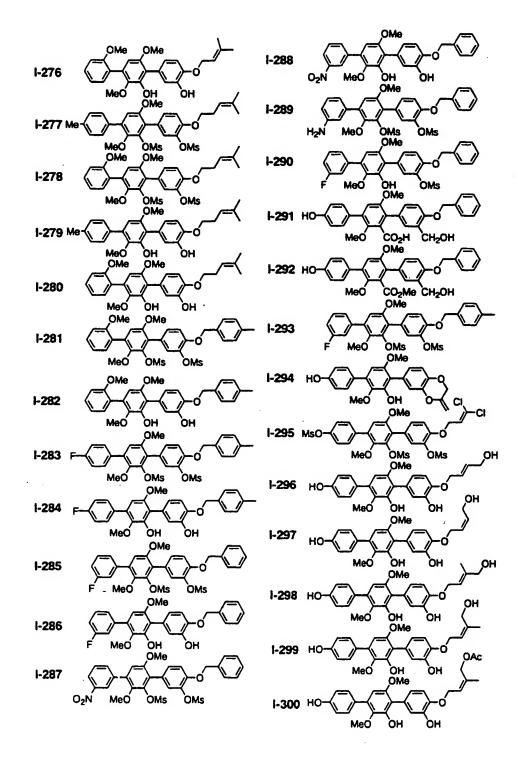


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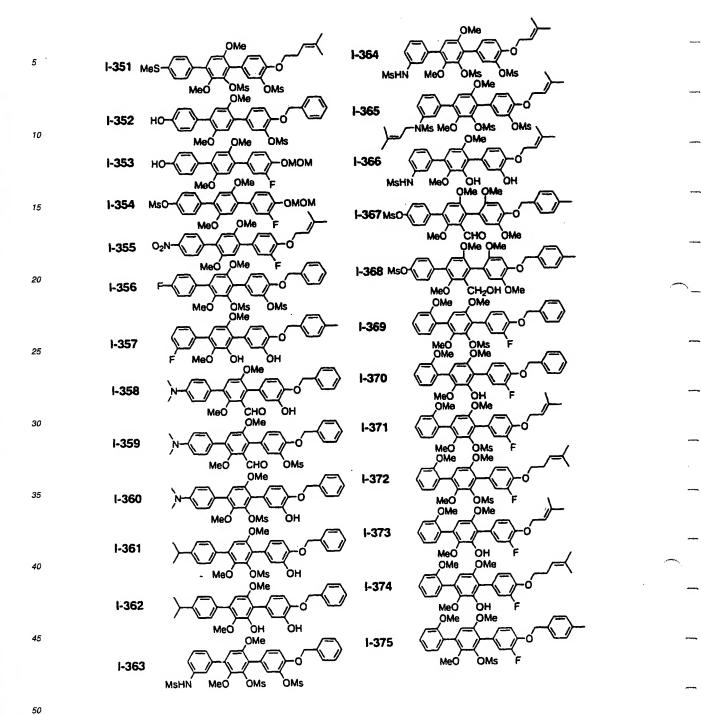
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3	MeO OMs OMs MeO OH OH OH OMe
	I-202 MsO
10	MeO OMs OMs
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	I-203 MsO — MeO OMs OMs
15	MeO OMs OMs OMe OMe OMe
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20	I-205 MsO I-217 HO
	MeO OMs OMs OMe OMe
	I-206 HO I-218
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30	1-208 HO
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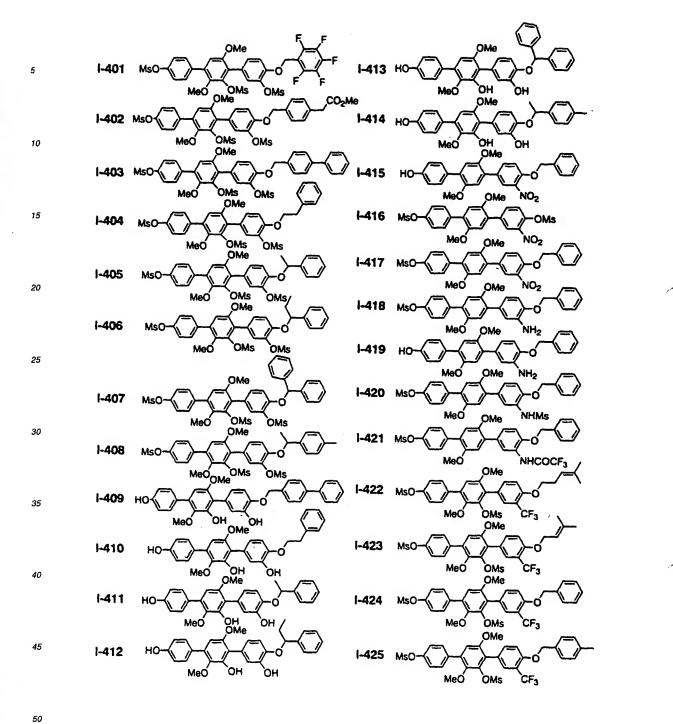
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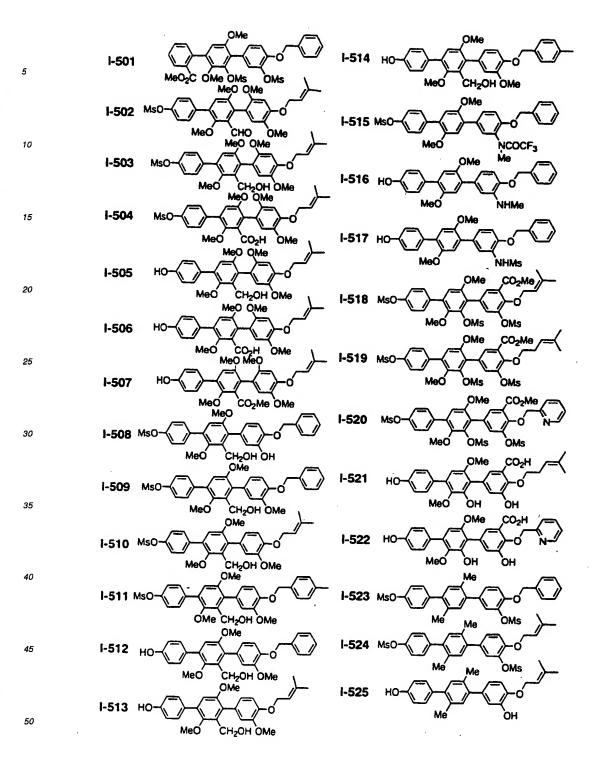
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MeO CO <sub>2</sub> H F MeO OMS OMe MeO <sub>2</sub> C OMe
I-333 MsO — — — — — — — — — — — — — — — — — — —
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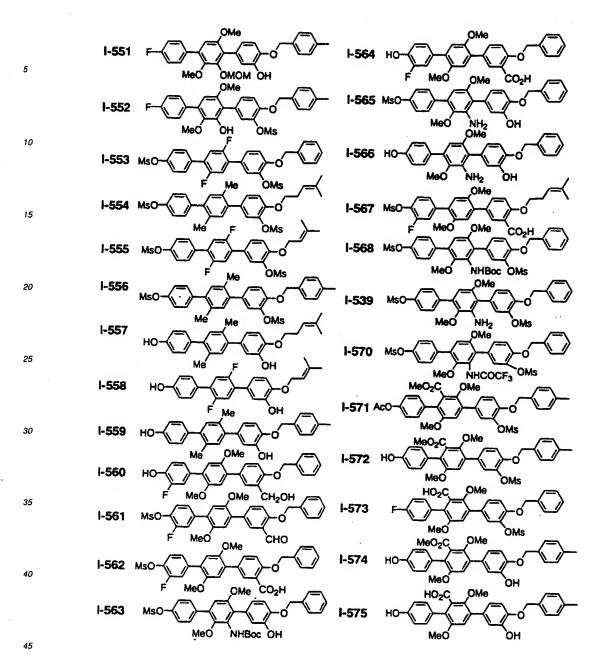


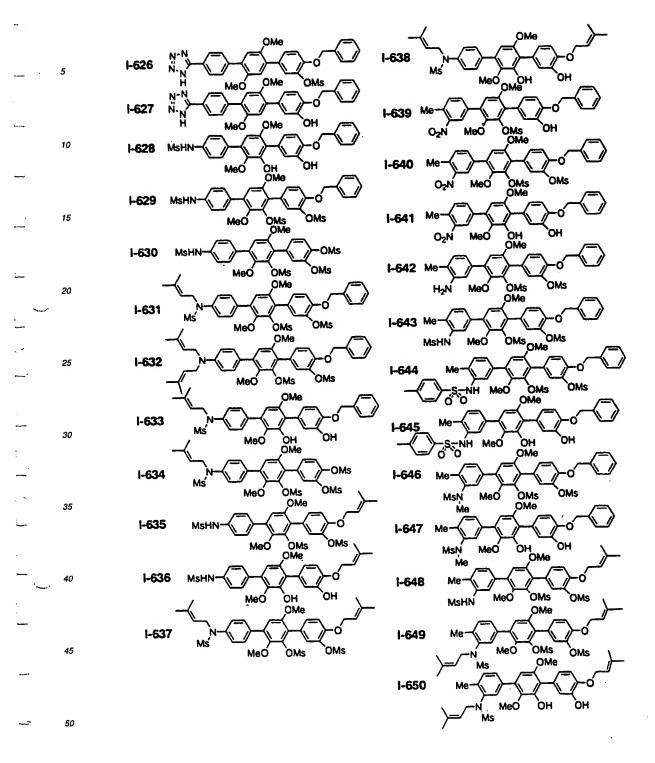


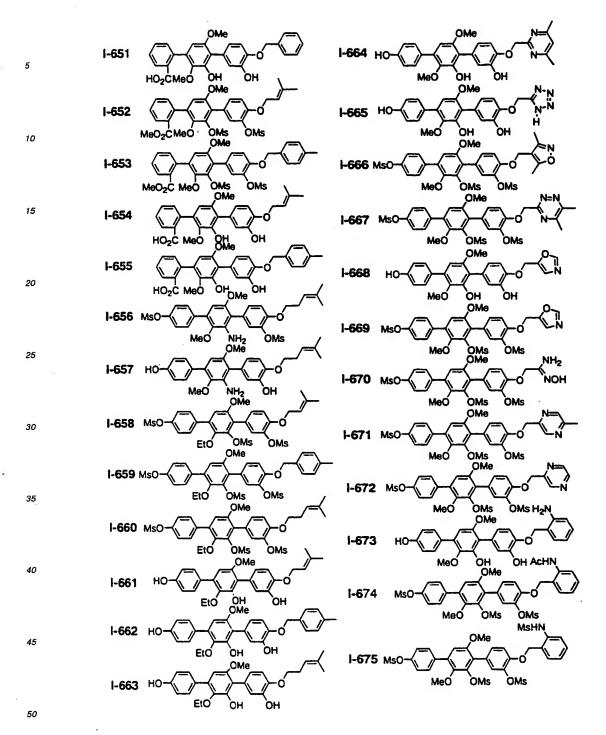
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15	I-704 F	I-717 HO-OHOHOHOHOH
20	I-705 MsO OMe OH	I-718 HO OH OH I
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25	I-707 MOMOCH <sub>2</sub> ————————————————————————————————————	MeO OH OH  NHBoc  OMe  1-720 MsO
30	I-708 MsO OMe	MeO OMs OMs NH <sub>2</sub>
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40	MeÓ ÓH ÓH OMe I-710 HO	I-722 MsO OMs OMs NHMs
40	MeO - OH OH S I-711 MsO NH₂	I-723 MsO OMs OMs OMs N Ms
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25	EtO OMS OMS 1-769 ACHN F MeO OMS OMS
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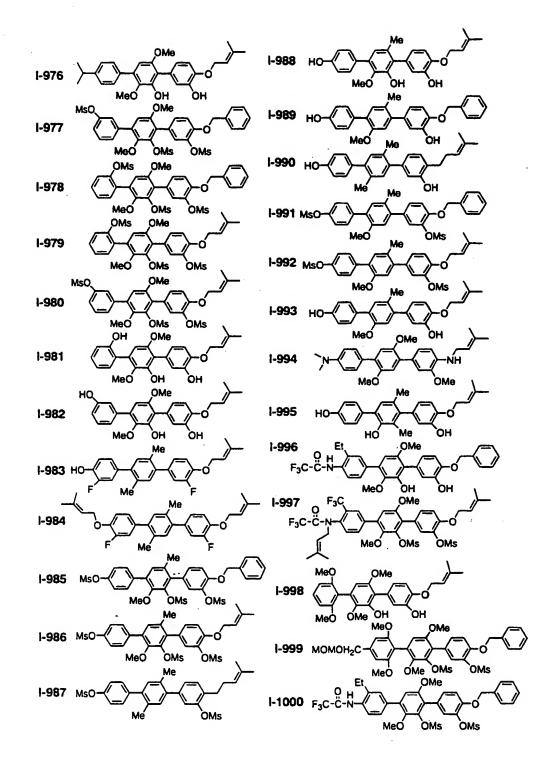
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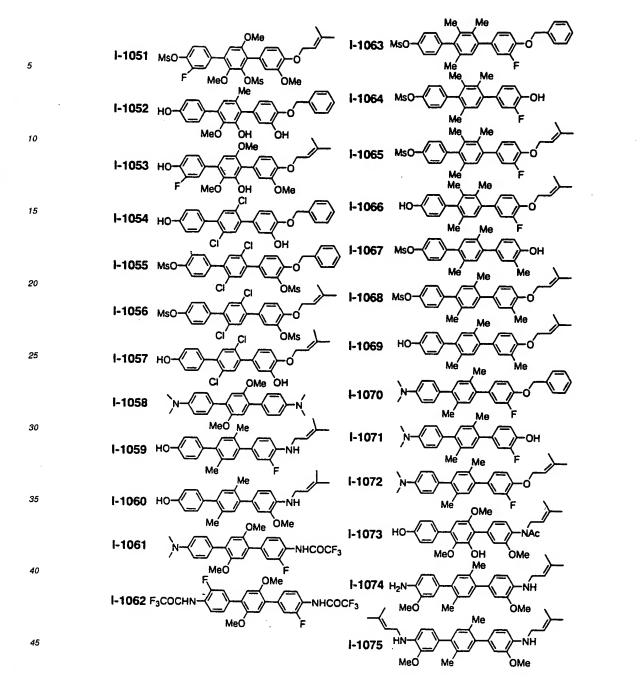
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I-879 HOH <sub>2</sub> C   I-891 F <sub>3</sub> C - C - N   I-891 F <sub>3</sub> C - N
MeO OMs OMs MeO OMs OMs F OMe
I-880 HOH <sub>2</sub> C
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I-881 MsO- I-893 H <sub>2</sub> N- I-893 H
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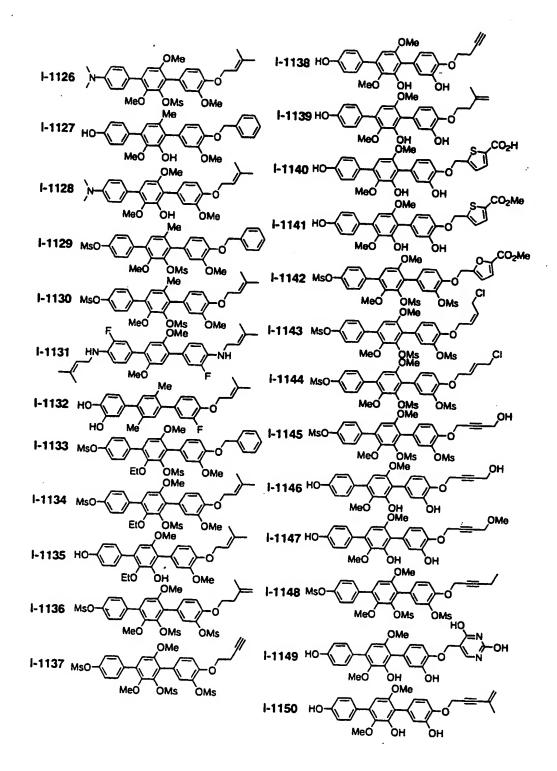
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1-929	N-C-NH <sub>2</sub> Me OMe CF <sub>3</sub>	HN OH OH OH OH OME
I-930	MsO OMS OMSBr.	I-942 Me OMS OMS
l-931	HO————————————————————————————————————	I-943 H <sub>2</sub> N OMS OMS
I-932	HO————————————————————————————————————	I-944 H <sub>2</sub> N F MeO OH OH
1-933	HO————————————————————————————————————	I-945 MsO-OH
I-934	HO-CHO OH NH2	1-946 MsO — Me Me F
I-935	MeO OH HN-Ac	I-947 MsO
I-936	HO-COME  - MeO O F	I-948 HO
1-937		I-949 NOME OH F
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10	I-953 N-OME OME F	Med OH OH OH OMe
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20	I-955 HO Me Me	MeO OH OH F Me F
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40	I-961 HO	I-973 HOH <sub>2</sub> C
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50	Me´ OMe	I-975 MeO OMs OMs OMs





I-1076 MsO-OMS OH	I-1088 HO OH OH
I-1077 HO-C-CF3	I-1089 MsO OMS OiPr
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I-1080 MsO-OH OMs	MeÓ OH OiPr OMe
I-1081 HO MeO OH OH	MeO OMs OiPr OMe
I-1082 MsO OMe	MeO OH OiPr
I-1083 MsO	H-1094 HO OH CI OMe
I-1084 MsO	MeO OMe F
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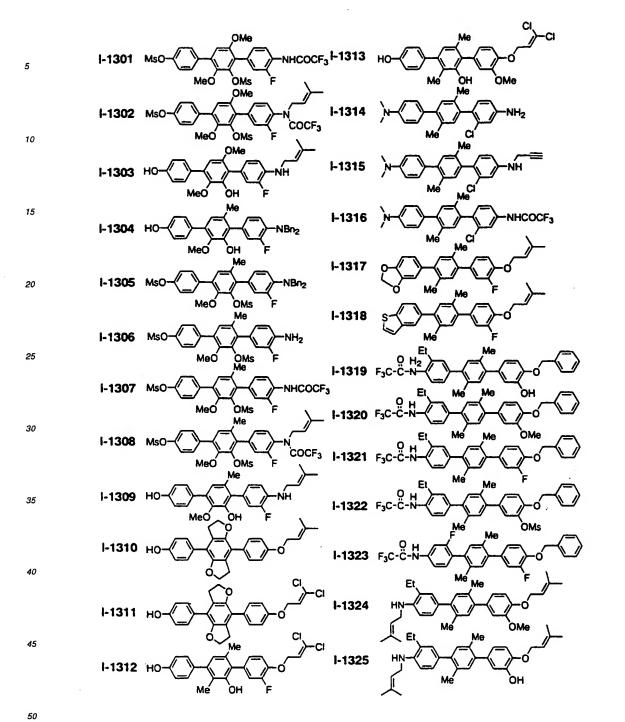
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Table 1

50	45	40	35	30	25	20	15	10	5
<u>:</u>	m.p.201-203°C <sup>1</sup> HNMR(DMSO-d <sub>6</sub> ) δ 3.44(s,3H),3.48(s,3H),3.62(s,3H),3.92(s,3H),7.09(s,1H),7.40-7.53(m,2H),7.65-7.78(m,2H)	3.44(s,3H),3	3.48(s,3H),3.62	(s,3H),3.92(s,3	H),7.09(s, HI),	7.40-7.53(m,2l	I),7.65-7.78(n	n,21I)	·
111.2	<sup>1</sup> HINMR(CDCl <sub>3</sub> ) δ 3.47(s,3H),3.94(s,3H),7.13-7.24(m,3H),7.50-7.59(m,2H) (R(R <sub>1</sub> )1700,1562,1479,1438,1393,1226,1199,1180,1161,1076,1047cm <sup>-1</sup>	(Cl <sub>3</sub> ) δ 3.47(8,3H),3.94(8,3H),7.13-7.24(m,3H),7.50-7.59(m,2H),10.41(8,1H) 0,1562,1479,1438,1393,1226,1199,1180,1161,1076,1047cm	(8,3H),7.13-7.3 3,1226,1199,1	24(m,3H),7.50- 180,1161,1076,	7.59(m,2H),10 ,1047cm	.41(8,1H)			
11.3	m.p.181-182°C 1HNMR(CDCl <sub>3</sub> ) & 3.21(s,3H),3.40(s,3H),3.49(s,3H),3.90(s,3H),4. 2H)	2°C ICL <sub>13</sub> ) & 3.21(s,3H),3.40(s,3H),3.49(s,3H),3.90(s,3H),4.81(s,2H),4.85(s,2H),6.86(s,1H),7.32-7.40(m,2H),7.60-7.68(m,	)(s,3H),3.49(s,5	3H),3.90(s,3H),	4.81(8,2H),4.8	5(s,2H),6.86(s,	111),7.32-7.40	(m,2H),7.60-′	7.68(m,
11.4	1HNMR(CDCI;) 6 2.95(6,3H),3.18(8,3H),3.21(8,3H),3.41(8,3H),3.91(8,3H),6.84(8,1H),7.37(d,J=8.9Hz,2H),7.63(d,J=8.9Hz,2H)	2.95(s,3H),3.18	(s,3H),3.21(s,5	3H), 3.41(8,3H),	3.91(s,3H),6.8	4(s, 1H), 7.37(d,	J=8.9Hz,2H),	7.63(d,J=8.9}	(z,2H)
11-5	m.p.140-141°C 111NMR(CDCla) & 3.21(8,3H),3.46(8,3H),3.48(8,3H),3.96(8,3H),7.40(d,J=8.9Hz,2H),7.54(d,J=8.9Hz,2H) 1R(KBr)1446,1426,1409,1370,1362,1184,1153,1029,973,920,870,849,776cm <sup>-1</sup>	1°C (Cl3)	(s,311),3.48(s,5	HI),3.96(8,3H), 029,973,920,87	7.40(d,J=8.91] 0,849,776cm	z,211),7.54(d,J:	=8.911z,211)		
9-11	Tokyo Kasei Kogyo Co., Ltd.	o Co., Ltd.							
11.7	HNMR(CDCh,) & :3.51(e,3H),3.92(e,3H),6.05(e,2H),6.92(d,J=8.1Hz,1H),7.02(d,J=8.1Hz,1H),7.07(e,1H),7.18(e,1H),10.40(e,1H)	3.51(a,3H),3.92 1577 1474 1442	(8,3H),6.05(8,5 7.1422.1388.13	2H), 6.92(d, J=8.	1Hz, 1H), 7.02(	d,J=8.1Hz,1H)	,7.07(s,1H),7.	.18(s, 111), 10.4	0(a, 1H
11.8	HNMR(CDCl <sub>3</sub> ) 8 3	(Cl3) δ 3.20(8,3H),3.77(9,3H),3.90(6,3H),6.86(8,1H),6.98(8,1H),7.32.7.37(m,2H),7.51.7.56(m,2H)	(s,3H),3.90(s,3	)H),6.86(s,1H),(	6.98(s, 1H), 7.3;	2.7.37(m,2H),7	.51.7.56(m,2l	(F	
11-9	HNMR(CDCE) & 3.	$(213) \delta \ 3.20(8,3H), 3.34(8,3H), 7.37-7.47(m,3H), 7.63-7.63(m,3H), 7.71(d,J=2.1Hz,1H)$	s,3H),7.37-7.4	7(m,3H),7.53-7	.63(m,3H),7.7	1(d,J=2.1Hz,11	1)		
11.10	HINMR(CDCl3) & 3	(Cl3) δ 3.76(8,3H),3.90(8,3H),6.85(8,1H),6.97(8,1H),7.08-7.15(m,2H),7.42-7.49(m,2H)	(s,3H),6.85(s,1	(H),6.97(s,1H),	7.08-7.15(m,21	1),7.42-7.49(m	2H)		
[[-11	oil 'HNMR(CDCl <sub>3</sub> ) & 2	Cl <sub>3</sub> ) δ 2.72(s,3H),3.11(s,3H),3.75(s,3H),3.92(s,3H),5.17(s,2H),7.05-7.16(m,2H),7.24-7.50(m,2H).	(s,3H),3.76(s,3	(H),3.92(s,3H),	5.17(8,2H),7.00	5-7.16(m,2H),7	.24-7.50(m,2I	H).	

Table 2

111-12	oil HINMR(CDCl <sub>3</sub> ) & 3.51(8,3H), 3.70(8,3H), 3.89(8,3H), 5.28(8,2H), 6.65(6,1H), 6.97&7.47(Al9q, J=8.6Hz,4H)
	m.p.120-1227C4HNMR(CDCl3) & 3.20(s,3H),3.53(s,3H),3.70(s,3H),3.89(s,3H),5.28(s,2H),6.63(s,1H),7.32-7.37(m,4H),
111-13	[11-13] (m,211) [R(KBr)1505,1468,1427,1375,1237,1175,1153,1100,1072,1003,972cm <sup>-1</sup>
111.14	III.P. 146-147°C HINMR(CDCB) & 3.85(9,311), 6.94-7.01(m,211), 7.38-7.56(m,611)
	IR(KBr)1603,1522,1481,1288,1255,1036cm '
111.15	HNMR(CDCl <sub>1</sub> ) 6 3.07(s,6H),3.49(s,3H),3.92(s,3H),6.95(brs,2H),7.20(s,1H)7.51(d,J=8.7Hz,2H),10.42(s,1H)
111-16	HINMR(CDCL <sub>3</sub> ) & 3.48(s,311),3.50(s,311),3.92(s,311),6.81(s,111),7.70(s,411)
111-17	HNMR(CDCl <sub>3</sub> ) & 3.24(8,3H),3.49(8,3H),3.94(8,3H),7.21(8,1H),7.42(d,J=8.4Hz,2H),7.65(d,J=8.4Hz,2H),10.41(8,1H)
	m.p.88-89°C
111.18	1HNMR(CDCl <sub>3</sub> ) & 2.20(8,3H),2.38(8,3H),3.19(8,3H),7.06(8,1H),7.33(8,4H),7.46(8,1H)
	IR(KBr)1479,1366,1195,1173,1151,970,865,850,796cm-'
	m.p.72-73°C
61-111	1HNMR(CDCl <sub>3</sub> ) δ 3.20(ε,3H),7.20(dd,J=6.6,8.4Hz,1H),7.35·7.44(m,3H),7.53·7.60(m,2H)
	IR(KBr)1514,1481,1364,1335,1182,1144,979,870,798cm <sup>-1</sup>
	m.p.144.146°C
111.20	1HNMR(CDCl <sub>3</sub> ) δ 3.45(e,3H),3.89(e,3H),4.99(bre,2H),6.19(e,1H),6.42(e,1H),6.88-6.94(m,ZH), ι.44- ι.49(m,ZH)
	IR(KBr)3471,3392,29863,1612,1596,1461,1410,1223,1175,1099,1079,1011cm-1

Table 3

15.

i i	
111-21	oil HINMR(CDCh <sub>3</sub> ) & 1.09(t,J=7.5Hz,3H), 1.82-1.94(m,2H), 3.58(s,3H), 3.86(s,3H), 4.06(t,J=6.6Hz,2H), 6.63(s,1H), 6.94-6.99(m,2H), 7.44-7.49(m,2H) IR(film):3100-2800(br), 1609, 1583, 1513, 1466, 1423, 1401, 1378, 1291, 1249, 1232, 1178, 1127, 1097, 1034, 1012cm <sup>-1</sup>
111.22	m.p.83.5-84.5 \$\tau_1 \), 3.20(br, 1H), 3.54(s, 3H), 3.85-3.90(m, 2H), 3.86(s, 3H), 3.90(s, 3H), 4.29-4.32(m, 2H), 6.66(s, 1H), 6.95-7.00(m, 2H), 7.45-7.50(m, 2H)  [7.45-7.50(m, 2H)]  [1.45-7.50(m, 2H)]  [1.45-7.50(m, 2H)]
111.23	m.p.99-101°C <sup>1</sup> HNMR(CDCl <sub>3</sub> )
111.24	HNMR(CDCl <sub>3</sub> ) & 3.22(8,3H),3.45(8,3H),3.94(8,3H),7.04(8,1H),7.32-7.43(m,2H),7.58-7.69(m,2H),10.42(8,1H)   HNMR(CDCl <sub>3</sub> ) & 2.46(broad,1H),321(8,3H),3.43(8,3H),4.94(8,2H),6.83(8,1H),7.42-7.51(m,2H),7.57-7.68(m,2H)
111.26	m.p.109-110°C 'HNMR(CDCl <sub>3</sub> ) & 1.97(br,1H),3.21(t,J=6.6Hz,2H),3.86(8,3H),3.89(8,3H),3.90(t,J=6.9Hz,2H),6.76(8,1H),6.95-7.00(m,2H),7.49-7.53(m,2H)  7.53(m,2H)  IR(KBr)3600-2800(br),1609,1581,1511,1462,1441,1426,1385,1289,1250,1237,1179,1116,1078,1046,1031,1005cm <sup>-1</sup>
111-27	foam !HNMR(CDCl3) & 1.52(8,9H),3.20(8,3H),3.41(8,3H),3.90(8,3H),6.16(8,1H),6.76(8,1H),7.35(d,J=8.7Hz,2H),7.61(d,J=8.7Hz,2H) !R(KBr)3371,1718,1505,1497,1367,1241,1151,872cm <sup>-1</sup>

Table 4

	m.p.167-170°C
111.28	HINMR(CDCU <sub>3</sub> ) & 2.73(s,311),3.74(s,311),3.92(s,311),7.08-7.17(m,311),7.31-7.36(m,211)
	IR(CHCh)2934,1593,1560,1512,1477,1436,1411,1372,1167,1107,1076,997,958,892,839,815cm <sup>-1</sup>
	m.p.140.142°C
	111NMR(CDChi) § 3.27(s,3H),3.79(s,3H),3.90(s,3H),6.86(s,1H),6.97(s,1H),7.29(ddd,J=8.4,2.2,0.9Hz,1H),7.39(dd,J=11.0,2.2Hz
62-111	,1II),7.43(t,1=8.4Hz,1H)
	IR(KIR)1504,1421,1344,1225,1208,916,824cm <sup>1</sup>
111-30	111111111111111111111111111111111111
111.31	HNMR(CDCl <sub>3</sub> ) δ 3.78(s, 3H), 3.91(s, 3H), 6.88(s, 1H), 6.97(s, 1H), 7.60(d, J=8.1Hz, 2H), 7.71(d, J=8.1Hz, 2H)
	m.p.147-148°C
111.32	1HNMR(CDCh;) § 3.79(s,3H),3.92(s,3H),6.89(s,1H),7.01(s,1H),7.64·7.69(m,2H),8.26-8.31(m,2H)
	1R(KBr)3600-2800(br), 1595, 1511, 1490, 1422, 1354, 1249, 1215, 1145, 1106, 1032cm <sup>-1</sup>
	1HNMR(CDCl3) & 3.31(s,3H), 3.53(s,3H), 3.94(s,3H), 7.19(s,1H), 7.39(ddd,J=8.3,2.3,1.0Hz,1H), 7.39(dd,J=10.3,2.3Hz,1H),
111-33	7.43 (t,J=8.3Hz, 1H), 10.40(8,1H)
	1HNMR(CDCI <sub>3</sub> ) & 0.13(s,6H),0.97(s,9H),2.51(s,3H),3.73(s,3H),3.93(s,3H),5.09(s,2H),6.84-6.99(m,2H),6.89(s,1H),7.05(s,1H),7.
111-34	29-7.48(m,5H)
	m.p.124-128°C
111.35	1HNMR(CDCl <sub>3</sub> ) & 2.62(s,3H),3.74(s,3H),3.91(s,3H),5.19(s,2H),7.00·7.18(m,4H),7.30·7.49(m,5H)
	IR(CHCl <sub>3</sub> )2930,1607,1517,1480,1369,1148,1118,1082,1025,969,872cm <sup>-1</sup>

Table 5

98:-111	oil HINMR(CDCls) & 0.13(s,6H),0.96(s,3H),3.01(s,3H),3.69(s,3H),3.86(s,3H),4.81(s,2H),5.08(s,2H),6.88-6.94(m,3H),7.30-7.47(m, 5H) IR(KBr)3023,2932,2858,1579,1512,1471,1381,1264,1120,1083cm <sup>-1</sup>
111.37	oil 4HNMR(CDCEs) & 0.78(t,J=7.5Hz,3H), 1.03-1.25(m,2H), 1.38-1.47(m,2H), 3.68-3.72(m,2H), 3.70(a,3H), 3.86(a,6H), 5.16(a,2H), 5.45 3(a,1H), 6.81(dd,J=1.8,8.4Hz,1H), 6.86(a,1H), 6.95-6.97(m,2H), 7.36-7.46(m,5H) 1R(CHECD):3543,3200-2800(br), 1587, 1511, 1465, 1412, 1376, 1288, 1118, 1081, 1031cm <sup>1</sup>
111-38	m.p.104·105°C HNMR(CDCl <sub>3</sub> ) & 3.11(s,3H),3.77(s,3H),3.90(s,3H),5.17(s,2H),6.84(s,1H),6.98(s,1H),7.11(d,J=8.7Hz,1H),7.37·7.48(m,6H),7.5 1(d,J=2.4Hz,1H) IR(KBr)3600·2800(br),1503,1420,1389,1364,1246,1215,1185,1132,1117,1097,1030cm <sup>-1</sup>
111-39	m.p.134-136°C 'HNMR(CDCl <sub>3</sub> ) δ 3.78(a,3H),3.91(s,3H),5.29(s,2H),6.86(s,1H),6.97(s,1H),7.17(d,J=8.7Hz,1H),7.31-7.51(m,7H),7.63(dd,J=2.4, 8.7Hz,1H),8.01(d,J=2.4Hz,1H) IR(KBr)3434,1620,1532,1494,1413,1280,1222,1206,1133,1108,1037cm <sup>-1</sup>
111-40	m.p.100-101°C  HNMR(CDCl <sub>3</sub> ) & 3.55(s,3H),3.77(s,3H),3.90(s,3H),5.26(s,2H),6.84(s,1H),6.97(s,1H),7.16-7.31(m,3H)  IR(KBr)3600-2800(br),1524,1503,1449,1401,1380,1268,1246,1222,1200,1156,1126,1098,1078,1030 <sub>cm</sub> -1
111-41	m.p.109-110°C 'HNMR(CDC1 <sub>3</sub> ) & 1.54(8,9H),3.76(8,3H),3.90(8,3H),6.75(br,1H),6.84(8,1H),6.97(8,1H),7.21·7.29(m,2H),8.13(t,J=8.7Hz,1H) IR(KBr)3600·2800(br),1720,1593,1531,1509,1427,1393,1245,1223,1214,1201,1162,1137,1105,1029cm <sup>-1</sup>

Table 6

111-42	foam HNMR(CDC1 <sub>3</sub> ) & 2.36(s,3H),3.74(s,3H),3.88(s,3H),6.69(dd,J=0.6,3.6Hz,1H),6.85(s,1H),6.99(s,1H),7.24-7.27(m,2H),7.23(dd,J= =1.8,8.7Hz,1H),7.60(d,J=3.6Hz,1H),7.64(d,J=1.2Hz,1H),7.80-7.83(m,2H),8.02(d,J=8.4Hz,1H) IR(KBr)3600-2800(br),1508,1463,1444,1421,1373,1246,1216,1176,1132,1093,1038cm <sup>-1</sup>
111-43	foatin HINMR(CDCl3) & 3.14(s,311),3.51(s,311),3.93(s,311),5.20(s,211),7.17(d,J=8.4Hz,1H),7.20(s,1H),7.38(m,6H),7.69(d,J=1.8Hz,1H ),10.40(s,111) 
111.44	·HNMR(CDCl <sub>3</sub> ) δ 0.20(s,6H),0.13(s,6H),0.77(s,9H),0.97(s,9H),3.73(s,3H),3.83(s,3H)),5.08(s,2H),6.06(s,2H),6.88-6.96(m,3H),7.01(s,1H),7.30-7.49(m,5H)
111-45	mp 106-108°C 111-45 '!INMR (CDCl <sub>3</sub> ) 6 3.21(s,3H),3.43(s,3H),3.94(s,3H),5.87(s,1H),7.39(d,J=9.0Hz,2H),7.55(d,J=9.0Hz,2H) 11R(KBr)3410,1460,1422,1362,1146,1037,874,915,787cm <sup>-1</sup>
111-46	mp 123·124°C 1HNMR(CDCl <sub>31</sub> ) δ 2.48(brs, 1H), 3.21(s, 3H), 3.43(s, 3H), 3.94(s, 3H), 4.93(brs, 2H), 6.83(s, 1H), 7.37(d, J=9.0Hz, 2H), 7.63(d, J=9.0Hz, 2H)) J=9.0Hz, 2H) 1R(KBr)3524,1463,1352,1233,1152,1009,979,869cm <sup>-1</sup>
111-47	mp107-109°C 111.47 'HNMR(CDCM <sub>3</sub> ) & 1.93(s,6H),2.45(s,6H),4.75(brs,1II),6.87-6.96(m,4H) 1R(KBr)3367,1612,1509,1433,1214,990,824cm <sup>-1</sup>

Table 7

111-48	oil HINMR(CDCL <sub>3</sub> ) & 1.14(t, J=6.9Hz, 3H), 1.46(t,J=6.9Hz, 3H), 3.58(q,J=6.9Hz, 2H), 3.58(q,J=6.9Hz, 2H), 6.19(s,1H), 6.41(s,1H), 6.86-6.92 (m,2H), 7.43-7.49(m,2H) IR(CHCL <sub>3</sub> )3688,3594,3502,2982,1612,1517,1172,1080,1026,925cm. <sup>1</sup>
111.49	ЧИММ(СЭЭСЭ) δ 0.02(9,6H),0.12(8,6H),0.90(8,9H),0.93(9,9H),4.54(8,2H),4.76(8,2H),6.84-6.89(m,2H),7.16-7.22(m,2H),7.37(9,1H),7.69(8,1H)
111.50	mp 173-1761. III-50 'HNMR(CDCh,) & 3.21(s,3H),3.47(s,3H),3.89(s,3H),6.15(s,1H),6.42(s,1H),7.24-7.37(m,2H),7.61-7.66(m,2H) IR(KBr)3408,2934,1604,1480,1360,1146,1089,1004,865,709,547cm <sup>-1</sup>
111-51	mp 156-158 C III-51 'IINMR(CDCl3) & 3.21(s,3H),3.39(s,3H),3.90(s,3H),6.05(s,1H),7.36-7.44(m,4H) IR(KBr)3410,2938,1505,1457,1413,1337,1194,1143,1084,1014,876,826,542,519cm <sup>-1</sup>
111-52	mp181-183°C !!!NMR(CDCL;) & 3.19(s,3H),3.88(s,3H),4.21-4.24(m,2H),4.39-4.42(m,2H),6.49(s,1H),7.45(ABq,J=8.7Hz,4H) !R(KBr)3435,1598,1505,1474,1425,1366,1178,1147,1113cm <sup>-1</sup>
111-53	mp155-157°C !HNMR(CDC!s) δ -0.11-0.02(m,2H),0.33-0.44(m,2H), 0.91(m,1H), 3.20(s,3H), 3.41(d,J=7.0Hz,2H), 3.50(s,3H),3.92(s,3H), 6.88 (s, 1H), 7.51(ABq,J=8.6Hz,4H) IR(KBr)3434,1505,1472,1416,1386,1371,1357,1242,1179,1149,1084cm <sup>-1</sup>
111-54	mp105-107°C <sup>1</sup> HNMR(CDCl <sub>3</sub> ) & 3.20(s,3H),3.39(s,3H),3.89(s,3H),4.77(s,2H),6.40(s,1H),7.33-7.55(m,5H) <u>IR(KBr)3411,1592,1572,1507,1482,1467,1437,1360,1339,1232,1204,1175,1148,1125,1092cm</u> <sup>-1</sup>

Table 8

111.55	mp 138-140°C <sup>1</sup> HNMR(CDCl <sub>3</sub> ) & 1.14(t, J=7.0Hz, 3H), 3.59(q, J=7.0Hz, 2H), 3.88(s, 3H), 4.97(bs, 1H), 6.42(s, 1H), 6.86-6.94(m, 2H), 7.43-7.51 <sup>1</sup> HNMR(CDCl <sub>3</sub> ) & 1.14(t, J=7.0Hz, 3H), 3.59(q, J=7.0Hz, 2H), 3.88(s, 3H), 4.97(bs, 1H), 6.42(s, 1H), 6.86-6.94(m, 2H), 7.43-7.51 <sup>1</sup> HR(Rb <sup>3</sup> )3384,3291,2978,1614,1593,1676,1519,1484,1469,1455,1436,1417,1366,1306,1286,1267,1203,1171,1127,1094,1029c
	m. <sub>1</sub>
111-56	mp 162-164 C HIL-56 HINMR(CDCha) & 2.77(6,3H),3.17(8,3H),3.75(8,3H),7.10(6,2H),7.35-7.43(m,4H)
	1HNMR(CDCl <sub>3</sub> ) & 2.35(s,3H),3.77(s,3H),6.84-6.87(m,2II),7.12(s,1H),7.13(s,1H),7.35-7.38(m,2H)
/9-111	$IR(CHC_{13})3596,2959,2939,2840,1611,1563,1517,1489,1464,1438,1384,1367,1329,1296,1258,1173,1102,1049,1035,1001,911,$
	891,835cm <sup>-1</sup>
	mp173.176°C
111.58	1HNMR(CDCl <sub>3</sub> ) & 6.91-6.94(m,2H),7.31-7.34(m,2H),7.87(s,1H),8.09(s,1H),9.89(s,1H),10.28(s,1H)
	IR(CHCl <sub>3</sub> )3437, 1685, 1610, 1516, 1456, 1394, 1370, 1261, 1238, 1214, 1173, 1144, 1053, 1012, 939, 905, 829, 808, 557, 458cm <sup>-1</sup>
	mp173.176°C
-	1HNMR(CDCl <sub>3</sub> ) δ 1.10(t,J=6.9Hz,3H), 1.48(t,J=6.9Hz,3H), 3.20(ε,3H), 3.47(ε,3H), 3.66(q,J=6.9Hz,2H), 4.11(q,J=6.9Hz,2H),
60-111	6.79 (s.1H), 7.32-7.39(m,2H),7.60-7.66(m,2H)
	IR(CHCl <sub>3</sub> )1502,1458,1372,1176,1148,1074,1023,967,870cm <sup>-1</sup>
111.60	11 NMK(CDCl3) § 2.17(6,3H),2.39(6,3H),3.19(8,3H),5.80(8,1H),6.71(6,1H),7.33(8,4H)

Table 9

mp 107-108 \(\mathcal{U}\)  HINMR(CDC\(\mathcal{L}\)\\  1R(KBr)1704,1422,1358,1224,1148,1090,1026,974,876cm <sup>-1</sup> mp 121-122 \(\mathcal{U}\)  HINMR(CDC\(\mathcal{L}\)\\  3.45(\(\mathcal{R}\),3.47(\(\mathcal{R}\),3.93(\(\mathcal{R}\),3.93(\(\mathcal{R}\),4.68(\(\mathcal{R}\),4.77(\(\mathcal{R}\),22(\(\mathcal{R}\)),7.22(\(\mathcal{R}\),1H),7.49(\(\mathcal{L}\),2H),7.56(\(\mathcal{R}\)  HINMR(CDC\(\mathcal{L}\)\\  2H), 10.42 \((\mathcal{R}\),1130,1040,860cm <sup>-1</sup>	υ (2.13) δ 3.21(s,3H),3.79(s,3H),4.04(s,3H),7.39(d,J=8.9Hz,2H),7.57(d,J=8.9Hz,2H),7.68(s,1H),10.17(s,1H)) 14,1422,1358,1224,1148,1090,1026,974,876cm <sup>-1</sup> 15  17  18  19  19  19  19  19  19  19  19  19
.) δ 3.45(8,3H), 3.47(8,3H), 3.93(8,3H), 4.68(8,2H), 4.77( H) 476,1422,1232,1189,1130,1040,860cm	(9,2H), 7.22(8,1H), 7.49(d,J=8.1Hz,2H), 7.56(d, J=8.1Hz,
mp113-115°C 'HNMR(CDCL <sub>3</sub> ) & 2.18(s,3H),3.22(s,3H),3.89(s,3H),6.85(s,1H),7.11(s,1H),7.36(s,4H) 1R(KBr)1497,1413,1354,1230,1146,1097,976,864cm <sup>-1</sup>	1H),7.36(8,4H)
HINMR(CDCl <sub>3</sub> ) & 5.65(s, 111), 7.18(s, 111), 7.30-7.35(m, 211), 7.46-7.50(m, 311)   HINMR(CDCl <sub>3</sub> ) & :1.30(d, J=7.2Hz, 6H), 2.96(quintet, J=7.2Hz, 1H), 3.82(s, 31   Hz, 2H), 7.44(s, 1H), 7.49(d, J=8.1Hz, 2H)	Ch <sub>3</sub> ) δ 5.65(s,111),7.18(s,111),7.30-7.35(m,211),7.46-7.50(m,311) Ch <sub>3</sub> ) δ :1.30(d,J=7.2Hz,6H),2.96(quintet,J=7.2Hz,1H),3.82(s,3H),3.91(s,3H),5.92(brs,2H),6.91(s,1H),7.30(d,J=8.1 (s,1H),7.49(d,J=8.1Hz,2H))
mp118-122°C HINMR(CDCl3) & 3.80(s,3H),3.91(s,3H),5.88(s,2H),6.84-6.92(m,3H),7.39-7.47(m,3H) IR(KBr)3600-2800(br),1606,1617,1492,1461,1415,1397,1330,1265,1205,1171,1052cn	.39-7.47(m,3H) 05,1171,1052cm <sup>-1</sup>
mp227-230°C !HNMR(CDCl3) & 0.25(s,6H),1.02(s,9H),2.33(s,3H),2.82(s,2H),6.88-6.93(m,2H),7.16(s,1H),7.21-7.25(m,3H),8.11(s,1H) IR(KBr)3600-2800(br),1608,1514,1393,1346,1267,1167cm <sup>1</sup>	93(m,2H),7.16(s,1H),7.21-7.25(m,3H),8.11(s,1H)
mp134·137°C 'HNMR(CDCl <sub>3</sub> ) δ 3.00(s,6H),3.81(s,3H),3.91(s,3H),6.00(s,2H),6.77·6.82(m,2H),6.90(s,1H),7.41(s,1H),7.46·7.51(m,3H) IR(KBr)3600-2800(br),1601,1528,1494,1466,1439,1399,1362,1321,1198,1166,1118,1051cm <sup>-1</sup>	32(m,2H),6.90(s,1H),7.41(s,1H),7.46-7.51(m,3H) 88,1166,1118,1051cm <sup>-1</sup>
	IR(KBr)3600-2800(br), 1601, 1628, 1439, 1390, 1399, 1362, 1301, 1105, 1106, 111), 1118, 111, 1118, 111, 1118, 111, 111

Table 10

!	
111.69	mp144-148°C HINMR(CDCh.) & 2.38(s,3H),2.82(s,3H),3.01(s,6H),7.79-7.83(m,2H),7.18(s,1H),7.27-7.31(m,2H),8.11(s,1H) DATO-NGOO SOUTH, 1619-1593-1389-1328-1328-1328-1
	III(INIT) SANO ZOUG(BI), INIZ, I DZI, I TITI TOUG TOUGHT T
	mp122-126°C
30	HINMR(CDCl <sub>3</sub> ) δ 0.10(8,9H), 0.78(8,6H), 2.96(8,6H), 3.75(8,3H), 3.84(8,3H), 6.08(8,2H), 6.72·6.78(m,2H), 7.01(8,1H), 7.22·
0. 	7.29 (m, 211)
	1R(KBr)3600-2800(hr), 1613, 1528, 1463, 1416, 1402, 1360, 1346, 1251, 1218, 1195, 1136, 1092, 1062, 991cm <sup>-1</sup>
	111111111111111111111111111111111111
17:111	,1H),7.08(s,1H),7.30-7.50(m,6H)
í	111NM18((31)(31,3) \$ 2.51(8,611), 2.75(8,611), 5.15(8,211), 5.67(8,114), 6.94(8,114), 6.96(d,J=8.4Hz,111), 7.04(dd,J=2.1,8.4Hz,114),
27.11	7.18 (s, 111), 7.20(d,J=2.1Hz,1H),7.37·7.47(m,5H)
	IR(CHCl <sub>3</sub> )3032,3428,3000-2800(br),1730,1611,1625,1489,1455,1256,1171,1137,1100,1036cm <sup>-1</sup>
32	1HNMR(((1)((!), 0), 2.21(8, 3H), 2.37(8, 3H), 5.15(8, 2H), 5.69(br, 1H), 6.73(dd, J=8.4, 1.8Hz, 1H), 6.89-6.99(m, 2H), 7.07(8, 1H), 7.26-7.4
67-111	6(m,61l)
	1HNMR(CDCl <sub>3</sub> ) δ 1.09(t,J=7.2Hz,3H), 1.22(t,J=7.5Hz,3H), 2.55(q,J=7.2Hz,2H), 2.72(q,J=7.5Hz,2H), 6.15(8,2H), 6.70(8,1H),
111.74	6.73 (dd, J=8.4,1.8Hz,1H), 6.89(d,J=1.8Hz,1H),6.95(d,J=8.4Hz,1H),7.04(e,1H),7.38-7.47(m,6H)
	1R(CHCl <sub>3</sub> )3542,2970,2933,1586,1508,1480,1384,1324,1290,1160,1127,1064,1011,930,898,879,857cm <sup>-1</sup>
	1HNMR(CDCl <sub>3</sub> ) 6 2.04(s,3H),3.70(s,3H),3.90(s,3H),5.19(s,2H),5.50(m,1H),6.73(dd,J=2.1Hz,1H),6.97.7.00(m,2H),7.29-7.48(m
111-75	(H9')

Table 11

)	5	)		)	i	1		1		r
92-111	1HNMR(CDCla) <i>6</i> 7.03 (m, 2H), 7.39-7 IR(CHCla)3529,296	OCE) & 2.04(s,3H),3.90(s,3H),5.15(s,2H),5.49(s,1H),5.74(s,1H),6.71(dd,J=8.1,2.1Hz,1H),6.85(d,J=2.1Hz,1H),6.99- ), 7.39-7.45(m,5H) 529,2963,2940,1731,1587,1566,1510,1480,1455,1412,1382,1323,1290,1248,1128,1099,1009,935,879cm <sup>-1</sup>	3H), 5.16(s, 2H	l),6.49(a,114) 480,1455,14	,5.74(s,1H),6 12,1382,1323	.71(dd,J=8.1,2 .1290,1248,11	.1Hz,1H),6.0	85(d,J=2.1H: 9,935,879cm	z,1H),6.99-	-1
111-77	mp87-89°C HINMR(CDCl3) & 2 IR(CHCl3)1510,148	ICI3)	H),5.18(s,2H)	),6.90-7.10(n	1,4H),730-7.E 812cm <sup>-1</sup>	1(m,6H)				<del></del>
81.111	111NMR(CDCL) & 1.25(d,J=6.9Hz,GH), 2.24(a,3H), 3.26(sept,J=6.9Hz,HI), 5.20(a,2H), 6.95(ddd,J=8.3,2.2,1.2Hz,1H), 7.06 (t, J=8.3Hz, 1H), 7.06(dd,J=11.9,2.2Hz,H), 7.10(a,1H), 7.17(a,1H), 7.32-7.51(m,5H)  1R(KBr)1492,1420,1228,1203,1140,1012,989,841cm <sup>-1</sup>	(Cls) & 1.25(d,J=6.9Hz,GH), 2.24(s,3H), 3.26(sept,J=6.9Hz,HH), 5.20 l), 7.06(dd,J=11.9,2.2Hz,HH),7.10(s,HH),7.17(s,HH),7.32-7.51(m,5H) 2,1420,1228,1203,1140,1012,989,841cm <sup>-1</sup>	), 2.24(s,3H), H),7.10(s,1H) 12,989,841cr	. 3.26(sept,d ),7.17(s,1H), m <sup>-1</sup>	=6.9Hz, 1H), 7.32-7.51(m,	5.20(s,2H), 6.9 5H)	5(ddd,J=8.3	,2.2,1.2Hz,1	H), 7.06 (t,	·
67-111	<sup>1</sup> HNMR(CDCl <sub>3</sub> ) δ 2.43(8,3H),5.19(8,2H),7.06(t,J=8.9Hz,1H),7.18-7.48(m,10H) HR(KBr)1491,1437,1214,1135,890,810,748cm <sup>-1</sup>	43(s,311),5.19(s,2F 1214,1135,890,810	H),7.06(t,J=8 ,748cm <sup>-1</sup>	3.9Hz, 1H),7.	18-7.48(m,10	H)				
111-80	mp77-79°C 1HNMR(CDCl <sub>3</sub> ) δ 3.921(s,3H),5.21(s,2H),6.90-6.99(m,3H),7.31-7 IR(KB <sub>1</sub> )3600-2800(b <sub>7</sub> ),151 <u>8,1477,1418,1237,1212,1167,1140cm-</u>	Cl <sub>3</sub> ) δ 3.921(s,3H),5.21(s,2H),6.90-6.99(m,3H),7.31-7.50(m,7H) 0-2800(br),1518,1477,1418,1237,1212,1167,1140cm <sup>-1</sup>	2H),6.90-6.99 8,1237,1212,	J(m,3H),7.31	-7.50(m,7H)				·	
111-81	mp103-105°C 1HNMR(CDCl <sub>3</sub> ) ô 2.16(s,3H),2.37(s,3H),2.42(s,3H),3.16(m,3H),5.21(s,2H),7.16-7.17(m,3H),7.24-7.27(m,1H),7.36-7.48(m,5H) IR(CHCl <sub>3</sub> )2940,1613,1514,1478,1455,1423,1366,1331,1292,1264,1176,1140,1126,1096,1045,1009,972,955,920,843cm <sup>-1</sup>	16(s,3H),2.37(s,3H),3.1514,1478,1455,1	H),2.42(8,3H) 1423,1366,13	),3.16(m,3H)	,5.21(s,2H),7	.16-7.17(m,3H	),7.24-7.27(r 45,1009,972	n, 1H), 7.36-7 ,955,920,843	.48(m,5H) lcm <sup>.1</sup>	
111-82	HINMR(CDCl3) & 2	$(213) \delta = 2.19(8,311), 3.88(8,311), 5.20(8,211), 6.84(8,111), 6.95(m,111), 7.03-7.05(m,311), 7.35-7.49(m,511)$	H), 5.20(s, 2H)	),6.84(s,1H),	3.95(m, 1H),7	.03-7.05(m,3H	),7.35-7.49(r	n,5H)		
111-83	mp83-85℃ !HNMR(CDCl <sub>3</sub> ) δ 2.19(s,3H), 3.88(s,3H), 3.91(s,3H), 5.21(s,3H), 6.76(dd,J=8.4,2.1Hz,1H), 6.82(d,J=2.1Hz,1H), 6.87(s,1H), 6.93(d, J=8.4Hz, 1H), 7.08(s,1H),7.32-7.50(m,5H) IR(CHCl <sub>3</sub> )2962,2937,1613,1579,1499,1464,1456,1443,1421,1319,1249,1170,1140,1103,1029,1008,989,901,832cm <sup>-1</sup>	Cl <sub>3</sub> ) δ 2.19(s,3H), 3.88(s,3H), 3.91(s, 4Hz, 1H), 7.08(s,1H),7.32-7.50(m,5H) 962,2937,1613,1579,1499,1464,1455,1	IH), 3.91(s,3l 7.50(m,5H) 1464,1455,14	H), 5.21(6,3]	H), 6.76(dd,J	=8.4,2.1Hz,1F	), 6.82(d,J= 29,100 <u>8,989</u>	2.1Hz,1H), (	6.87(s,1H),	
										ŀ

Table 12

	lio
111.84	$111.84    111NMR(CDCB_3) \circ 1.44(d_1J = 6.911z_311), 2.19(s_1311), 4.09(q_1J = 6.911z_2H), 5.20(s_1211), 6.82(s_1111), 6.94.7.08(m,3H), 7.32.7.49(m,6H)   111.84  $
	IR(CHCh(xh)35597,2928,1731,1609,1523,1494,1476,1387,1298,1261,1173,1127,1048,834cm <sup>-1</sup>
111-85	111-85 IIINMR(CDC33) & 2.26(8,311),2.52(8,311),3.90(8,311),4.59(brs,211),5.20(8,211),6.73-7.10(m,411),7.27-7.52(m,611)
111.86	111.86 HINMR(CDCD) 2.33(s.3H) 2.81(s.3H) 4.60(brs.2H), 5.20(s.2H), 6.92-7.18(m,4H), 7.30-7.52(m,6H)

 $\text{HNMR(CDCI_3)} \ \delta \ 1.77(\text{s},3\text{H}), 1.81(\text{s},3\text{H}), 2.72(\text{s},3\text{H}), 3.24(\text{s},3\text{H}), 3.49(\text{s},3\text{H}), 3.80(\text{s},3\text{H}), 4.64(\text{d},\text{J}=6.9\text{Hz},2\text{H}), 5.50(\text{m},1\text{H}), 6.86(\text{s},3\text{H}), 3.80(\text{s},3\text{H}), 4.64(\text{d},\text{J}=6.9\text{Hz},2\text{H}), 5.50(\text{m},1\text{H}), 6.86(\text{s},3\text{H}), 3.80(\text{s},3\text{H}), 4.64(\text{d},\text{J}=6.9\text{Hz},2\text{H}), 5.50(\text{m},1\text{H}), 6.86(\text{s},3\text{H}), 3.80(\text{s},3\text{H}), 4.64(\text{d},\text{J}=6.9\text{Hz},2\text{Hz}), 5.60(\text{m},1\text{H}), 6.86(\text{s},3\text{H}), 3.80(\text{s},3\text{H}), 4.64(\text{d},\text{J}=6.9\text{Hz},2\text{Hz}), 5.60(\text{m},1\text{H}), 6.86(\text{s},3\text{Hz}), 6.86(\text{s},3\text{Hz})$ 

1H), 7.10(d, J=8.7 Hz, 1H), 7.35(dd, J=2.1, 8.7 Hz, 1H), 7.39(d, J=2.1 Hz, 1H), 7.55-7.69(m, 2H), 7.82-7.87(m, 2H).

 $IR(CHCl_3)3030, 1608, 1518, 1480, 1369, 1322, 1269, 1230, 1179, 1131, 1120, 1097, 1081, 1016cm^{-1}, 1120, 1131, 1130, 1131, 1131, 1130, 1131,$ 

Table 13

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d,J=2.2and8.211z,111),6.92(d,J=2.211z,111),6.94(m,211),6.96(d,J=8.211z,111),7.54(m,211),7.62(brs,111),7.78(s,111),8.64(brs,111)  $\text{HNMR}(\text{CDCB}) \ \delta \ \ 2.67 (8,311), 3.13 (8,311), 3.21 (8,311), 3.56 (8,311), 3.78 (8,311), 6.19 (8,211), 6.84 (8,111), 7.15 (4,J=8.6 \text{Hz},111), 7.30-7. \\$ 111NMR(acetone-da) & 1.77(brs, 311), 1.79(brs, 341), 3.37(s, 311), 3.73(s, 341), 4.63(brd, J=6.6Hz, 211), 5.52(m, 1H), 6.49(1H, s), 6.83(d IR(KBr)3433,2937,1609,1519,1474,1463,1364,1322,1295,1274,1235,1183,1167,1120,1095,1077,1016cm<sup>-1</sup> IR(KBr)3538,3510,3460,3330,1605,1521,1490,1455,1247,1220,1120,1070,1010cm-1 55(m,1H),6.84(s,1H),7.09(d,J=8.4Hz,1H),7.30-7.42(m,4H),7.65-7.75(m,2H) IR(KBr)3393,2932,1611,1588,1522,1490,1117,1071,1001cl-3m<sup>-1</sup> IR(KBr)1519,1481,1364,1179,1153,1083,970,877,796cm-1 IR(KBr)1373,1361,1179,1149,1079,874,799cm 55-7.69(m,2H),7.82-7.87(m,2H) 50(m,9H),7.60-7.75(m,2H) m.p.155.5-156°C m.p.136-138°C m.p.155-157C

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I-3

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Table 14

	m.p.92-94°C
,	$111NMR(CDCL3) \delta - 1.76(s, 3H), 1.82(s, 3H), 3.46(s, 3H), 3.77(s, 3H), 4.62(d, J=6.9Hz, 2H), 5.31(m, 1H), 5.71(s, 1H), 5.85(s, 1H), 6.47(s, 1H), 6.$
1:1	111),6.93(ddi,J=1.8,8.711z, 111),6.97(d,J=8.711z, 111),7.05(d,J=1.811z, 111),7.55·7.65(m,211),7.83·7.91(m,211).
	IR(RBr)3466,2939,1609,1587,1518,1498,1486,1464,1437,1406,1361,1324,1246,1216,1156,1125,1073cm <sup>-1</sup>
	HINMR(CDCL3) & 3.22(8,3H),3.45(8,3H),3.77(8,3H),4.74(8,2H),5.15(8,2H),6.93(8,1H),7.01(d,J=8.7Hz,2H),7.32-7.48(m,9H),7.
8-1	73(d,J=9.011z,211)
	IR(KBr)3400,1721,1612,1509,1471,1362,1242,1153,1040,1018cm '
	111NMR(CDCh.) 8 1.03(t,J=7.2Hz,3H),2.16(dq,J=7.2,6.0Hz,2H),3.46(s,3H),3.74(s,3H),4.68(d,J=5.4Hz,2H),5.70(m,2H),6.45(
6-1	s,1H),6.91(d,J=8.7Hz,2H),6.96(brs,2H),7.07(brs,1H),7.53(d,J=8.7Hz,2H)
	IR(Nujol)3445,3369,1612,1578,1623,1489,1268,1243,1112,1102,1071,1011,998,944,824,805,781cm <sup>-1</sup>
	m.p.174-175\?
	'HINMR(CDC13) & 3.11(9,3H),3.21(9,3H),3.45(9,3H),3.73(9,3H),4.49(brs,2H),5.18(9,2H),6.85(9,1H),7.15(d,J=8.4Hz,1H),7.27(
01.1	dd,J=8.4Hz,J=2.1Hz,1H),7.35-7.49(m,8H),7.70(m,2H)
	118(K18r)1619,1467,1360,1346,1331,1295,1272,1229,1180,1161,1122,1101,1081,1022,980,971,954,875,849,814,798,742,525,1101,1081,1022,980,971,954,875,849,814,798,742,525,1101,1081,1081,1081,1081,1081,1081,108
	cm · i
	$^{1} HNMR(CDCl_{3}) \delta \ 1.77(s,3H), 1.82(s,3H), 3.22(s,6H), 3.45(s,3H), 3.74(s,3H), 4.49(brs,2H), 4.64(d,J=7.2Hz,2H), 5.45\cdot5.55(m,1H), 3.74(s,3H), 4.49(brs,2H), 4.64(d,J=7.2Hz,2H), 6.45\cdot5.55(m,1H), 4.64(d,J=7.2Hz,2H), 4.64(d,J=7.2Hz,2H), 6.45\cdot5.55(m,1H), 4.64(d,J=7.2Hz,2H), 6.45\cdot5.55(m,1H), 4.64(d,J=7.2Hz,2Hz,2H), 6.45\cdot5.55(m,1H), 6.46(d,J=7.2Hz,2Hz,2H), 6.46(d,J=7.2Hz,2Hz,2H), 6.46(d,J=7.2Hz,2Hz,2Hz,2Hz,2Hz,2Hz,2Hz,2Hz,2Hz,2Hz,$
11:11	,6.85(s,1H),7.08(d,J=8.7Hz,1H),7.26(dd,J=8.7and2.1Hz,1H),7.33(d,J=2.1Hz,1H),7.36-7.41(m,2H),7.65-7.75(m,2H)
	IR(KBr)3553,3434,1516,1472,1365,1176,1150,973,871cm <sup>-1</sup>
	1HNMR(DMSO-d6) & 1.72(8,3H),1.77(8,3H),3.35(8,3H),3.65(8,3H),4.20(brs,2H),4.47(brt,J=4.4Hz,1H),4.65(brd,J=6.6Hz,2H),
1.12	5.40-5.57(m,1H),6.64(dd,J=8.2,2.0Hz,1H),6.70(d,J=2.0Hz,1H),6.75-7.00(m,4H),7.40·7.55(m,2H)
	IR(KBr)3435,1518,1475,1459,1261,1223,988cm <sup>-1</sup>

Table 15

113 7.00(m,J=1.8119, 7.32.7.50(m,711), 7.320(s,311), 3.20(s,311), 3.70(s,311), 5.70(s,311), 5.13(s,211), 5.67(s,111), 6.90(s,111), 6.89-6.96(m,211), 7.00(m,J=1.8119,111), 7.32.7.50(m,711), 7.70(d,J=9.0112,211)  110.140-141°  110.140-141°  110.140-141°  110.151-213.2.2.3.3(s,311), 3.15(s,311), 3.21(s,311), 3.21(s,311), 3.77(s,311), 5.16(s,211), 6.90(s,111), 7.09(d,J=8.9142,111), 1118, 1050, 867, 803, 708cm <sup>-1</sup> 110.140-141°  110.140-140-140-140-140-140-140-140-140-140-	0	5	0	5	o '	5	o	5	0	
	13	1HNMIR(CDCla) 5	2.71(s,3H),2.8 HD,7.32-7.50(n	34(s,311),3.20(s,71,710,4,3=	3H),3.42(s,3F	I),3.76(s,3H),	5.13(s,2H),5.6	7(s, 111),6.90(6	s, 1H),6.89-6.	96(m,2H),
	=	m.p.140-141°C HINMR(CDCL <sub>i</sub> ) δ 2H),7.30-7.50(m, <sup>4</sup> IR(KBr)1642,1610	3 2.71(s,3H),2. 9H),7.70(d,J=8 6,1467,136 <u>2,</u> 11	83(s,311),3.15(s 9Hz,211) 80,1151,1118,1	,311),3.21(s,3	II),3.42(8,3II)	,3.77(s,311),5.	16(s,211),6.90	(e, 1H), 7.09(d	,J=8.9Hz,
	-15	m.p.161-162°C 111NMR(CDCl <sub>3</sub> ) & 2H),5.49(t,J=6.6F IR(KBr)1643,151	1.76(s,3H),1. Hz,1H),6.90(S,1	81(s,3H),2.72(s .H),7.02(d,J=8. 277,1236,1180,	,3H),2.85(9,3 1Hz,1H),7.31 1150,974,882	H),3.21(s,3H) -7.37(m,2H),7 ,868,847,802,	,3.23(8,311),3.47.38(d,J=8.9Hz	42(s,311),3.77 2,2H),7.70(d,J	(s,3H),4.61(d	,J=6.6Hz,
	-16	m.p.206-207°C !HNMR(CDCl <sub>3</sub> ) & ),6.61(dd,J=8.3an .83(brs,1H),9.59(l	5 1.71(s,3H),1.5 nd2.1Hz,1H),6.5 brs,1H)	76(s,3H),2.62(s,71(d,J=2.1Hz,1	3H),2.69(8,3I H),6.86(d,J=£	1),3.27(s,3H), 3.7Hz,2H),6.8 9,799,759,543	3.71(8,3H),4.5 7(d,J=8.3Hz,1	3(d,J=6.8Hz,, H),6.95(s,1H)	2H),5.47(t,J=8.',7.47(d,J=8.'	-6.6Hz, 1H 7Hz,2H),8
	.17	m.p.171-172°C 1HNMR(DMSO-d m,1H),7.06-7.27(i 1R(KBr)1523,148	16) 6 1.74(d,J= m,4H),7.48&7. 33,1394,1366,13	0.9Hz,3H),1.77 74(ABq,J=9.0H 271,1175,1151,	(s,3H),2.97(s z,4H) 1087,1071,87	,3H),3.45(s,3]	H),3.51(e,3H),3	3.77(8,3H),4.6	55(d,J=6.6Hz	,2H),5.48(
	.18	111NMR(CDCl <sub>3</sub> ) & 45(s, 1H),6.88-6.9 IR(KBr)3393,152	5 1.76(s,3H),1.8 77(m,2H),7.04(d 23,1490,1466,1	30(s,3H),3.44(s, ld,J=9.0,9.0Hz, 403,1267,1229,	3H),3.76(8,3H 1H),7.15-7.29 1113,1070cm	H),4.63(d,J=6) (m,2H),7.45	.6Hz,2H),4.99(7.60(m,2H)	(s,1H),5.48-5.	62(m, 1H), 6.C	00(s, 1H), 6.

' Table 16

-	111NMR(CDCl3) & 2.56(s,3H),3.21(s,3H),3.52(s,3H),3.69(s,3H),5.19(s,2H),5.76(s,1H),6.92(dd,J=8.4and2.0Hz,1H),7.04(d,J=8
1-19	.411z,111),7.05(d,J=2.0Hz,111),7.35-7.51(m,7H),7.60(d,J=8.6Hz,2H)
-	411ΝΜΙΚ(CDCl3) δ 2.69(s,3H),3.14(s,3H),3.21(s,3H),3.53(s,3H),3.71(s,3H),5.20(s,2H),7.18(d,J=8.7Hz,1H),7.34·7.50(m,9H),7.
02-1	59(d,J=8.7Hz,2H)
	m.p.94-95 %
-	$\text{HINMR}(\text{CDCII}) \delta = 2.73(\text{s,3H}), 3.21(\text{s,3H}), 3.24(\text{s,3H}), 3.53(\text{s,3H}), 3.71(\text{s,3H}), 4.65(\text{d,J}=6.9\text{Hz,2H}), 5.50(\text{t,J}=6.9\text{Hz,1H}), 7.12(\text{d,J}=6.9\text{Hz,2H}), 6.50(\text{t,J}=6.9\text{Hz,1H}), 7.12(\text{d,J}=6.9\text{Hz,2H}), 6.50(\text{t,J}=6.9\text{Hz,1H}), 7.12(\text{d,J}=6.9\text{Hz,2H}), 6.50(\text{t,J}=6.9\text{Hz,1H}), 7.12(\text{d,J}=6.9\text{Hz,2H}), 6.20(\text{t,J}=6.9\text{Hz,2H}), 6.20(\text{t,J}=6.9Hz,2Hz,2Hz,2Hz,2Hz,2Hz,2Hz,2Hz,2Hz,2Hz,2$
1.2.1	8.6Hz, HI), 7.36(dd, J=8.6and2.1Hz, HI), 7.41(d, J=2.1Hz, 2H), 7.41(d, J=8.8Hz, 2H), 7.59(d, J=8.8Hz, 2H)
	IR(KBr)1516,1367,1180,1152,1039,975,869,799cm <sup>1</sup>
	m.p.148-150°C
901	1HNMR(CDCl <sub>3</sub> ) δ 3.42(s,3H),3.65(s,3H),4.63(d,J=6.9Hz,2H),4.98(brs,1H),5.53(t,J=6.9Hz,1H),6.92-6.96(m,4H),7.07(s,1H),7
1.22	.43(d,J=8.6Hz,2H)
	IR(KBr)3398,1612,1587,1523,1462,1410,1261,1211,1099,1036,984,962,919,838,815cm-1
	$^{1}$ HNMR(CDCl <sub>3</sub> ) $\delta$ 2.28(t,J=6.3Hz,1H),2.60(s,3H),3.21(s,3H),3.55(s,3H),3.77(s,3H),4.78(d,J=6.3Hz,2H),5.18(s,2H),6.84(e,1H)
1.23	),7.06(d,J=9.0Hz,1H),7.29-7.48(m,9H),7.69(d,J=8.7Hz,2H)
	1HNMR(CDCl <sub>3</sub> ) § 1.76(6,3H), 1.81(8,3H), 2.26(8,3H), 2.50(6,3H), 3.21(8,3H), 3.56(8,3H), 3.77(6,3H), 4.57(d, J=6.2Hz, 2H), 5.51(t, J
1.24	=6.2Hz,1H),6.83(s,1H),6.92(d,J=9.0Hz,1H),7.17.7.29(m,2H),7.36(d,J=8.7Hz,2H),7.70(d,J=8.7Hz,2H)
	IR(KBr)3434,1608,1512,1479,1364,1234,1176,1150,1078,1017cm <sup>-1</sup>
	11000013) & 1.75(8,3H),1.80(8,3H),2.27(8,3H),3.46(8,3H),3.74(8,3H),4.57(d,J=6.2Hz,2H),4.95(8,1H),5.53(t,J=6.2Hz,1H
1.25	),5.86(s,1H),6.45(s,1H),6.91(d,J=8.7Hz,2H),6.92(d,J=9.0Hz,1H),7.24(d,J=9.0Hz,1H),7.26(e,1H),7.53(d,J=8.7Hz,2H)
	IR(KBr)3399,1612,1566,1581,1520,1486,1237,1115,1078,1001cm <sup>-1</sup>

Table 17

	m.p.246-247°C
1.26	1HNMR(DMSO-da) & 5.16(s,311),6.84-6.87(m,211),7.05(s,211),7.14(s,111),7.32-7.43(m,3H),7.49-7.64(m,8H)
	IR(KBr)3600-3100(br), 1594, 1453, 1387, 1296, 1253, 1010cm <sup>-1</sup>
!	111NMR(DMSO-da) & 3.38(s,311),3.43(s,311),5.28(s,211),7.36-7.54(m,811),7.69-7.86(m,811)
1.27	IR(KBr)1488,1354,1286,1178,1151,1116cm 1
	m.p.162-163C
	111NMR(CDCB) 3 1.77(8,311), 1.82(8,311), 3.19(8,311), 3.23(8,311), 4.64(d,J=6.611z,211), 5.25-5.48(m,114), 7.09(d,J=9.0Hz,1H), 7.3
-28	6-7.40(m,211),7.52(dd,J=2.4,9.0Hz,1H),7.59(d,J=2.4Hz,1H),7.62(s,4H),7.63-7.69(m,2H)
	IR(KBr)1489,1363,1290,1177,1154,1115,971,860,809cm <sup>-1</sup>
	m.p.195°C
	111NMR(DMSO-d <sub>6</sub> ) & 1.72(s,311), 1.75(s,311), 4.57(d,J=6.3Hz,211), 5.45-5.50(m,1H), 6.84-6.87(m,2H), 6.98-7.11(m,3H), 7.50-7.6
62-1	4(m,6H)
	IR(KBr)3600-3200(br), 1609, 1594, 1497, 1257, 991cm <sup>-1</sup>
	m.p.145.148°C
3	${\tt HINMR(CDCIII)} \ \delta \ \ 1.60\cdot 2.20 (m,611), 2.72 (s,311), 3.21 (s,311), 3.24 (s,311), 3.56 (s,311), 3.78 (s,311), 4.92 (m,111), 5.88 (m,111), 6.02 (m,11$
Q:-	H),6.84(s,111),7.12(d,J=8.6Hz,1H),7.34-7.40(m,4H),7.69(m,2H)
	IR(KBr)1517,1481,1390,1362,1270,1244,1180,1151,1077,1012,973,960,873,817,799,521cm <sup>-1</sup>
	m.p.108.110°C
	$^{1}\text{HNMR(CDCl}_{3}) \ \delta \ \ 1.60 \cdot 2.20 (\text{m}, 6\text{H}), 3.46 (\text{s}, 3\text{H}), 3.76 (\text{s}, 3\text{H}), 4.86 (\text{m}, 1\text{H}), 5.02 (\text{bs}, 1\text{H}), 5.76 (\text{s}, 1\text{H}), 5.90 (\text{m}, 1\text{H}), 5.91 (\text{s}, 1\text{H}), 6.00 (\text{m}, 1\text{H}), 6.00 ($
10-1	11I),6.45(a,1H),6.90-7.07(m,5H),7.53(m,2H)
	IR (KBr)3485,1614,1523,1491,1457,1407,1312,1287,1269,1238,1195,1170,1115,1072,1014cm

Table 18

	m.p.188-190℃
	111NMR((3DCl3) & 2.69(8,3H),3.21(8,3H),3.26(8,3H),3.56(8,3H),3.78(8,3H),4.84(m,2H),6.42(dt,J=15.6Hz,J=5.7Hz,1H),6.79(d
1-32	,J=15.6Hz,1H),6.84(s,1H),7.15(d,J=8.4Hz,1H),7.28-7.43(m,9H),7.68(m,2H)
	IR(KBr)1519,1479,1447,1391,1360,1301,1273,1241,1228,1201,1175,1152,1120,1079,1014,974,959,947,868,819,795,777,74
	3,52 lcm <sup>1</sup>
	m.p.157-159°C
-	111NMR(CDCl <sub>3</sub> ) \(\delta\) 3.46(8,311),3.75(8,311),4.81(m,211),4.93(b8,111),5.70(8,111),5.91(8,111),6.45(8,111),6.46(dt,J=15.911z,J=6.0H
P-1	z, 1H),6.76(d,J=15.9Hz,111),6.90-7.09(m,5H),7.26-7.46(m,5H),7.54(m,2H)
	IR(KBr)3466,1611,1522,1489,1461,284,1248,1192,1165,1114,1073cm <sup>-1</sup>
	m.p.127·129°C
	1HNMR(CDCl3) 6 1.03and 1.04 (botht, bothJ=8.0Hz, total3H), 2.07-2.19 (m,2H), 2.71 and 2.72 (boths, total3H), 3.21 (s,3H), 3.24 (s,
1.34	3H),3.56(8,3H),3.78(s,3H),4.60and4.71(bothm,total2H),5.66-5.75and5.90-5.99(bothm,total2H),6.84(6,1H),7.09(d,J=8.4Hz,1
	H),7.33.7.41(m,4H),7.68(m,2H)
	IR(KBr)1519,1482,1390,1362,1232,1180,1150,1077,974,873,815,799,522cm <sup>-1</sup>
	m.p.166-168°C
2	111NMR(COOCIA) & 1.014 and 1.05(botht, bothJ=7.511z, total3H), 2.09.2.19(m,2H), 3.46(s,3H), 3.74(s,3H), 4.58and 4.68(bothm, tota
ee	1211),5.01(hs,111),5.69-5.78and5.87-5.95(bothm,total411),6.45(s,1H),6.90-7.06(m,5H),7.53(m,2H)
	IR(KBr)3531,3489,3306,1523,1492,1459,1408,1314,1287,1270,1255,1234,1224,1118,1072,1018,1005,822cm <sup>-1</sup>
	m.p.148·150℃
	1HNMR(CDCl <sub>3</sub> ) δ 1.62(s,3H), 1.69(s,3H), 1.76(s,3H), 2.08-2.20(m,4H), 2.71(s,3H), 3.21(s,3H), 3.24(s,3H), 3.56(s,3H), 3.78(s,3H),
J:36	4.66(d,J=6.3Hz,2H),5.09(m,1H),5.50(t,J=6.3Hz,1H),6.84(s,1H),7.10(d,J=8.4Hz,1H),7.33-7.41(m,4H),7.68(m,2H)
	IR(KBr)1519, 1480, 1464, 1449, 1389, 1366, 1291, 1271, 1233, 1200, 1176, 1150, 1118, 1079, 1012, 973, 946, 876, 841, 816, 801, 523, 51
	0cm <sup>-1</sup>

Table 21

55

50	45	40	35	30	25	20	15	10	5
1.50	111NMR(acetone-da) & 1.75(m,3H),3.39(s,3H),3.72(s,3H),4.72(m,2H),5.73-5.75(m,2H),6.48(s,1H),6.83(dd,J=2.0and7.8Hz,1H),6.92-6.95(m,3H),6.97(d,J=7.8Hz,1H),7.52(m,2H)	-da) \(\partial 1.75(m);\),6.97(d,J=7.8)	3H),3.39(s,3H) Hz,1H),7.52(n	,3.72(s,3H),4.°	72(m,2H),5.73	-5.75(m,2H),6	.48(s,1H),6.8;	3(dd,J=2.0and7	8Hz,1H
1-51	<sup>1</sup> HINMR(acetone-da) δ 1.77(s,3H),1.79(s,3H),3.41(s,3H),3.72(s,3H),4.66(m,2H),5.53(m,1H),6.49(s,1H),6.85(m,2H),7.04(d,J=8.1Hz,1H),7.19(d,J=2.1and8.1Hz,1H),7.19(d,J=2.1Hz,1H),7.25(m,2H)	-da) \( \delta \) 1.77(s,: 1d, J=2. I and 8.	cetone-d <sub>6</sub> )	,3.41(s,3H),3.7 1,J=2.1Hz,1H)	72(s,3H),4.66(r,7.25(m,2H)	m,2H),5.53(m,	,1H),6.49(s,1F	I),6.85(m,2H),7	.04(d,J=
1.52		5 2.58(t,J=2.2) 1H),7.35-7.46	Hz, HI), 2.73(s, (m,4H), 7.64-7.	3H), 3.22(s, 3H) 74(m, 2H)	),3.26(s,3H),3	.56(s,3H),3.78	(8,311),4.83(d	J=2.2Hz,2H),6.	85(s, 1H
1-53	11NMR(CDCl <sub>3</sub> ) & 3.45(s,311),3.76(s,311),4.36(d,d=1.511z,111),4.55(s,211),4.76(dd,d=1.8and0.6Hz,111),5.02(brs,111),5.97(d,d=0.9Hz,111),6.45(s,111),6.90-6.96(m,2H),6.90-7.05(m,2H),7.10-7.12(m,1H),7.50-7.58(m,2H)	3.45(s,3H),: 1H),6.90-6.96	DCl <sub>3</sub> ) δ 3.45(8,311),3.76(8,311),4.36(d,J=1.511z,111),4.55(8,211),4.76(dd,J=1.8an 6.45(8,1H),6.90-6.96(m,2H),6.96-7.05(m,2H),7.10-7.12(m,1H),7.50-7.58(m,2H	(d,J=1.5Hz, 11 05(m,2H),7.10	1),4.55(8,211),4	1.76(dd, J = 1.8t	and0.6Hz,1H)	,6.02(brs, 1H),5	=f,b)7e.
1-54	<sup>1</sup> HNMR(CDCl <sub>3</sub> ) & 1.76(s,3H),1.82(s,3H),2.61(s,3H),3.53(s,3H),3.77(s,3H),4.61(d,J=6.9Hz,2H),5.17(brs,1H),5.45-5.50(m,1H),6.72(s,1H),6.84(s,1H),6.88-7.00(m,4H),7.02(d,J=1.8Hz,1H),7.50-7.57(m,2H)	5 1.76(s,3H),1 3,1H),6.88-7.00	DCl <sub>3</sub> ) \(\delta\) 1.76(s,3H), 1.82(s,3H), 2.61(s,3H), 3.53(s,3H), 3.77(s,3H), 4.6 ,6.84(s,1H), 6.88-7.00(m,4H), 7.02(d,J=1.8Hz,1H), 7.50-7.57(m,2H)	(s,3H),3.53(s,3	3H),3.77(s,3H) ,7.50-7.57(m,2	,4.61(d,J=6.9I (H)	Hz,2H),5.17(b	rs, 1H),5.45-5.50	0(m, 1H)
1-55		3 0.99(d,J=6.5 3,1H),6.45(s,11	OCl <sub>3</sub> ) δ 0.99(d,J=6.5Hz,6H),1.74(q,J=6.5Hz,2H),1.85(m,1H),3.46(e,3H),5.90(s,1H),6.45(s,1H),6.92(m,2H),6.95(m,2H),7.06(m,1H),7.54(m,2H)	,J=6.5Hz,2H), 6.95(m,2H),7.	1.85(m,1H),3. 06(m,1H),7.54	46(s,3H),3.75(m,2H)	(s,3H),4.12(t,	=6.5Hz,2H),4.9	7(8,1H)
1.56	<sup>1</sup> HNMR(CDCl <sub>3</sub> ) δ 1.34(s,3H),1.35(s,3H),3.15(dd,J=3.6and6.6Hz,1H),3.39(s,3H),3.72(s,3H),4.10(dd,J=6.6and11.1Hz,1H),4. 34(dd,J=3.6and11.1Hz,1H),6.49(s,1H),6.83(dd,J=1.8and8.1Hz,1H),6.93(d,J=8.7Hz,2H),6.94(d,J=1.8Hz,1H),7.00(d,J=8.1Hz,1H),7.62(d,J=8.7Hz,2H)	1.34(s,3H),1 1.1Hz,1H),6.4 Hz,2H)	1.35(s,3H),3.15 9(s,1H),6.83(d	(dd,J=3.6andl d,J=1.8and8.1	6.6Hz, 1H),3.3t Hz, 1H),6.93(d	9(s,3H),3.72(s  ,J=8.7Hz,2H)	,3H),4.10(dd,	J=6.6and11.1H Hz,1H),7.00(d,J	z,1H),4. i=8.1Hz
1.57	<sup>1</sup> HNMR(CDCl <sub>3</sub> ) δ 2.68(s,3H),3.13(s,3H),3.53(s,3H),5.18(s,3H),6.19(s,2H),6.83(s,1H),7.10-7.19(m,3H),7.31-7.50(m,7H),7.57-7.64(m,2H)  7.64(m,2H)  1.07(kBr)1607,1520,1481,1373,1231,1176,1119,1078cm <sup>-1</sup>	2.68(s,3H),3 0,1481,1373,1	.13(s,3H),3.53(	(s,3H),3.78(s,3	(H),6.19(8,2H),	,6.83(s,1H),7.1	10-7.19(m,3H	,7.31-7.50(m,71	Н),7.67-
1.58	<sup>1</sup> HNMR(CDCl <sub>3</sub> ) δ 1.76(8,3H), 1.82(8,3H), 2.72(8,3H), 3.23(8,3H), 3.53(8,3H), 3.78(8,3H), 3.78(8,3H), 4.64(d,J=6.6Hz,2H), 6.84(t,J=6.6Hz,1H), 5.83(8,1H), 7.06-7.20(m,3H), 7.31-7.40(m,2H), 7.66-7.65(m,2H)	1.76(8,3H),1. 8,1H),7.06-7.2 1,1483,1376,1	DCl <sub>3</sub> )	8,3H),3.23(8,3 7.40(n),2H),7.£	H),3.53(s,3H),	3.78(s,3H),3.7	'8(s,3H),4.64(	d,J=6.6Hz,2H),	6.84(t,J

Table 22

	And a city a city of the a city of the cit
	111NMR(CDCl.) 0 1.76(8,3H), 1.82(8,3H), 3.45(8,3H), 3.75(8,3H), 4.62(0,J=6.9Hz,ZH), 5.52(1,J=6.9Hz,1H), 5.71(018,1H), 5.63(8,
1-59	1H),6.44(s, 1H),6.90-719(m, 5H),7.56-7.67(m, 2H)
	HR(KBr)3545,3385,1605,1586,1561,1520,1384,1311,1284,1225,1121,1096cm <sup>-1</sup>
	1HNMR(CDCl <sub>3</sub> ) 5 3.49(s, 3H), 3.74(s, 3H), 5.15(s, 2H), 5.68(s, 1H), 5.91(s, 1H), 6.02(s, 2H), 6.43(s, 1H), 6.88-7.19(m, 6H), 7.31-7.48(
1.60	m,5H)
	1R(CHCl3)3535,1615,1588,1519,1500,1482,1410,1290,1241,1204,1092,1041cm 1
	HINMR(CIDCIa) & 1.76(8,311), 1.81(8,311), 2.73(8,311), 3.23(8,311), 3.57(8,311), 3.77(8,311), 4.64(d,J=6.6Hz,1H), 5.50(t,J=6.6Hz,1H)
	),6.03(8,211),6.83(8,111),6.91(d,J=8.111z,111),7.08(d,J=8.111z,111),7.09(d,J=8.111z,111),7.14(8,111),7.34(d,J=8.111z,111),7.39(8,1
<u> </u>	H)
	IR(CHCl3)1607,1518,1477,1453,1369,1240,1178,1081cm · '
	111NMR(CDCl <sub>3</sub> ) \$ 1.76(8,3H), 1.82(8,3H), 3.49(8,3H), 3.74(8,3H), 4.61(d, J=6.9Hz, 2H), 5.53(t, J=6.9Hz, 1H), 5.68(8,1H), 6.02(8,2H)
1.62	),6.43(s,1H),6.88-6.96(m,3H),7.03-7.18(m,3H)
	IR(KBr)3494,1610,1583,1561,1519,1480,1460,1409,1286,1243,1191,1127,1089,1036cm <sup>-1</sup>
	m.p.201-202°C
-	111NMR(CDCl3) 5 3.78(s,6H),5.16(s,4H),5.69(s,2H),6.93(s,2H),6.99(d,J=8.4Hz,2H),7.08(dd,J=2.1and8.4Hz,2H),7.22(d,J=2.
F0-1	1Hz,2H),7.37-7.47(m,10H),
	IR(KBr)3600-3100(br), 1584, 1523, 1454, 1272, 1245, 1210, 1130cm <sup>-1</sup>
	m.p.173-175°C
1.64	1HNMR(CDCl <sub>3</sub> ) δ 3.12(8,6H),3.80(8,6H),5.18(8,4H),6.92(8,2H),7.12(d,J=8.7Hz,2H),7.36-7.50(m,12H),7.60(d,J=2.1Hz,2H)
	IR(KBr)1523,1492,1356,1290,1263,1210,1182,1114cm <sup>-1</sup>

Table 25

m.p.174-176°C HINMR(CDCB: 8,1H) 1R(GBc)3600-3 m.p.134-135°C HINMR(CDCB:	m.p.174-176℃ HINMR(CDCh) & 1.72(s,3H),1.76(s,3H),4.55(d,J=6.0Hz,2H),5.45-5.49(m,1H),6.82-7.43(m,10H),8.84(s,1H),9.45(s,1H),9.53( s,1H)
<del> </del>	11 11 11 11 11 11 11 11 11 11 11 11 11
	m.p.134-135% m.p.134-135% llINMR(CDCL) & 3.78(s,311),3.79(s,311),5.17(s,211),5.70(s,111),6.91(s,111),6.95(s,111),6.95(d,J=8.4Hz,111),7.07-7.14(m,311),7.
	22(d,J=2.1Hz,1H),7.36-7.47(m,5H),7.52-7.57(m,2H) 1R(KBr)3600-3100(br),1524,1494,1462,1381,1273,1248,1213cm
1.79 d,J=2.1Hz,1H) IR(KBr)1522,1	**************************************
HNMR(CDCI: 94(s,111),7.04.7	m.p.110-1111°C IHNMR(CDCh <sub>3</sub> ) & 1.77(s,3H),1.81(s,3H),3.22(s,3H),3.78(s,3H),3.80(s,3H),4.63(d,J=6.9Hz,2H),5.50-5.57(m,1H),6.91(s,1H),6. 94(s,1H),7.04-7.14(m,3H),7.47-7.58(m,4H) IR(KBr)1552,1493,1364,1212,1110,970cm <sup>1</sup>
1-81 3H),7.06-7.17 1R(KBr)3536	'HNMR(CDCL <sub>1</sub> ) & 1.77(s,3H),1.82(s,3H),3.78(s,3H),3.79(s,3H),4.62(d,J=6.9Hz,2H),5.50-5.55(m,1H),5.72(s,1H),6.91-6.95(m,3H),7.06-7.14(m,3H),7.20(d,J=1.8Hz,1H),7.52-7.57(m,2H) IR(KBr)3536,1520,1493,1386,1271,1241,1210cm <sup>-1</sup>
111NMR(CDC) 1-82 (m,111),6.61(e 1R(KBr)1758	<sup>1</sup> IINMR(CDCl <sub>3</sub> ) δ 1.29(t,J=7.2Hz,3H),1.76(s,3H),1.79(s,3H),3.78(s,6H),3.78(q,2H),4.64(d,J=6.3Hz,2H),4.72(s,2H),5.53-5.78 (m,1H),6.61(s,1H),6.94(s,1H),6.98(d,J=8.7Hz,1H),7.09-7.20(m,4H),7.52-7.57(m,2H) (m,2H) (m,2H) (m,2H),2.4,1496,1461,1387,1263,1209,1147cm <sup>-1</sup>

Table 26

	111NMR(CDCL <sub>3</sub> ) & 2.76(s, 3H), 3.21(s, 3H), 3.55(s, 3H), 3.77(s, 3H), 5.26(s, 2H), 6.85(s, 1H), 7.17(d, J=8.7Hz, 1H), 7.31-7.50(m, 8H), 7.
1.83	60-7.71(m,311),7.92(s,111)
	IR(KBr) 1684, 1606, 1512, 1478, 1177, 1150, 1080, 1016cm
	111111111111111111111111111111111111
1-84	16.511z,111),6.89(s,1H),7.13(s,2H),7.27(d,J=8.4Hz,1H),7.35-7.50(m,8H),7.69(d,J=8.4Hz,2H)
	1R(KBr)1708,1633,1513,1465,1367,1271,1230,1176,1151,1120,1017cm
	111NMR(CDCM <sub>3</sub> ) \$ 1.26(t,J=7.2Hz,3H),3.22(s,3H),3.31(s,3H),3.74(s,3H),4.16(q,J=7.2Hz,2H),5.16(s,2H),5.70(s,1H),6.53(d,J=1.11),1.11,1.11,1.11,1.11,1.11,1.11,1.1
1-85	16.5Hz, 111), 6.69(dd, J=8.4nnd2.4Hz, 111), 6.88(8, 211), 7.00(d, J=8.4Hz, 1H), 7.33-7.50(m, 8H), 7.70(d, J=8.4Hz, 2H)
	1R(KBr)3398,1675,1627,1581,1512,1465,1370,1284,1256,1221,1148,1074,1017cm <sup>-1</sup>
	1HNMR(CDCl <sub>3</sub> ) \$\delta\$ 2.53(8,3H),3.21(8,3H),3.56(8,3H),3.77(8,3H),4.58(8,2H),5.24(8,2H),6.83(8,1H),6.96(d,J=8.4Hz,1H),7.28-7.
1-86	57(m,9H),7.69(d,J=8.4Hz,2H)
	IR(KBr)1605,1512,1479,1366,1233,1175,1149,1080,1015cm <sup>-1</sup>
	$^{1}$ HNMR(CDC)3) $\delta$ 1.76(8,3H),1.81(8,3H),3.27(9,3H),3.78(8,3H),3.79(8,3H),4.63(d,J=6.6Hz,2H),5.40-5.50(m,1H),5.71(8,1H),6.71(8,1
1.87	07(s,111),6.91-6.95(m,311),7.05-7.20(m,311),7.43-7.51(m,2H)
	IR(KBr)3600-3200(br), 1617, 1525, 1494, 1464, 1361, 1292, 1208, 1178, 1101, 1033cm-1
	HNMR(CDCl <sub>3</sub> ) δ 2.57(s, 3H), 3.20(s, 3H), 3.56(s, 3H), 3.79(s, 3H), 5.18(s, 2H), 6.84(s, 1H), 7.06-7.15(m, 1H), 7.20-7.40(m, 9H), 7.47-
1.88	7.57(m,2H),7.60-7.75(m,3H),8.20-8.25(m,2H)
	111NMR(CDCl3) \$ 3.44(8,3H),3.75(8,3H),5.01(8,1H),5.18(8,2H),6.01(8,1H),6.45(8,1H),6.88-6.97(m,2H),7.07(dd,J=8.4and8.4
1.89	Hz,1H),7.15-7.21(m,1H),7.27(dd,J=12.3and2.1Hz,1H),7.29-7.43(m,3H),7.46-7.56(m,4H)

Table 27

55

50	45	40	35	30	<i>2</i> 5	20 ·	15	10	5
06-1	1HNMR(CDC13)	1(3,1) & 1.68(s,3H),1.75(d,J=0.9Hz,3H),2.55(dt,J=6.9a Hz,2H),5.17-5.28(m,1H),6.84(s,1H),7.04(dd,J=8.4and 22,1483,1361,1352,1176,1156,1079,963,873,801cm	75(d,J=0.9Hz,: 1H),6.84(s,1H) 76,1156,1079,	3H),2.55(dt,J:,7.04(dd,J=8.	-6.9and6.9Hz, 4and8.4Hz,1H	2H),2.70(s,3H ]),7.11-7.22(m,	),3.21(8,3H),3 2H),7.34-7.42	.55(s,3H),3.77(s,	3H),4 5(m,2
1.91	<sup>1</sup> HINMR(CDCL <sub>3</sub> ) δ 2.96(8,3H),3.52(8,3H),3.58(8,6H),3.73(8,3H),4.89(8,2H),6.19(8,2H),5.23(9,2H),5.25(8,2H),6.68(8,1H),6.98(d,3=8.411z,1H),7.04(dd,3=8.4and2.1Hz,1H),7.11(m,2H),7.25(d,3=2.1Hz,1H),7.30-7.40(m,5H),7.51(m,2H) <sup>1</sup> R(KBr)2962,2935,2896,1609,1621,1477,1463,1438,1383,1269,1228,1183,1163,1130,1116,1078,1066,1020,1008,984,922,903,832,801,730cm <sup>-1</sup>	2.96(s,3H),3 4(dd,J=8.4anc 5,2896,1609,16 01,730cm <sup>-1</sup>	52(s,3H),3.58( 42.1Hz,1II),7.1 521,1477,1463	s,6H),3.73(s,5 11(m,2H),7.25 ,1438,1383,15	3H),4.89(8,2H) (d,J=2.1Hz,11 269,1249,1228	,6.19(s,2H),5.5 1),7.30-7.40(m 1,1183,1163,11	3(s,2H),5.25( ,5H),7.51(m,2 30,1116,1078	3,2H),6.68(s,1H), H) ,1066,1020,1008	6.98(
1.92	mp122-124°C <sup>1</sup> HNMR(CDCl <sub>3</sub> ) δ 2.70(brs,3H),3.55-3.60(br,2H),3.60(s,3H),3.75(s,3H),3.81-3.83(m,2H),3.87(s,3H),5.15(s,2H),5.68(s,1H),6.69(s,1H),6.94(dd,J=2.1,8.4Hz,1H),6.97-7.03(m,3H),7.07(d,J=1.8Hz,1H),7.38-7.48(m,5H),7.51-7.56(m,2H) <sup>1</sup> IR(KBr)3600-2800(br),1607,1597,1550,1518,1477,1462,1452,1299,1248,1228,1175,1122,1096,1084,1015cm <sup>-1</sup>	2.70(brs,3H), =2.1,8.41[z,11 )(br),1607,159	3.55-3.60(br,2 1),6.97-7.03(m 7,1550,1518,1-	(H),3.60(s,3H) (3H),7.07(d,J:	1,3.75(8,3H),3 =1.8Hz,1H),7.: 2,1392,1289,1:	81-3.83(m,2H) 38-7.48(m,5H) 248,1228,1175	,3.87(8,3H),5. ,7.51-7.56(m, <sup>2</sup> ,1122,1096,10	15(s,2H),5.68(s,1 11) 84,1015cm <sup>-1</sup>	Н),6.
1-93	1HNMR(CDCl <sub>3</sub> ) δ 2.59(dt,J=6.6,6.6Hz,2H),3.45(s,3H),3.74(s,3H),4.15(t,J=6.6Hz,2H),5.15(dm,J=10.2Hz,1H),5.21(dm,J=17. 111z,111),5.90(m,111),6.45(s,1H),6.92(d,J=8.4Hz,2H),6.95(s,2H),7.06(brs,1H),7.53(d,J=8.4Hz,2H) 11R(Nujol)3670,3526,3336,3205,1616,1596,1524,1493,1409,1315,1286,1264,1239,1225,1117,1072,821,783cm <sup>-1</sup>	2.59(dt,J=6.6 II),G.45(s,1II),t is,3336,3205,1	,6.6Hz,2H),3.4 6.92(d,J=8.4H: 1616,1596,152	15(8,3H),3.74( z,2H),6.95(8,2 1,1493,1409,1	s,3H),4.15(t,J: H),7.06(brs,11 315,1286,126	=6.6Hz,2H),5.1 H),7.53(d,J=8.4 1,1239,1225,1	15(dm,J=10.2] 1Hz,2H) 117,1072,821,	4z,1H),5.21(dm,	J=17.
1.94	<sup>1</sup> HNMR(CDCl <sub>3</sub> ) δ 0.36(m,2H),0.66(m,2H),1.31(m,1H),3.45(s,3H),3.74(s,3H),3.91(d,J=7.2Hz,2H),6.44(s,1H),6.91(d,J=8.7Hz 2H),6.93(m,2H),7.07(d,J=1.8Hz,1H),7.53(d,J=8.7Hz,2H) 1R(Nujol)3570,3491,3364,3178,1617,1598,1583,1524,1494,1408,1313,1285,1266,1240,1224,1115,1072,1011,822,786cm <sup>-1</sup>	OCl <sub>3</sub> ) & 0.36(m,2H),0.66(m,2H),1.31(m,1H),3. ,2H),7.07(d,J=1.8Hz,1H),7.53(d,J=8.7Hz,2H) )70,3491,3364,3178,1617,1598,1583,1524,14	66(m,2H),1.31 1H),7.53(d,J={ 1617,1598,158	(m,1H),3.45(t 8.7Hz,2H) 3,1524,1494,1	408,1313,128	1),3.91(d,J=7.5 5,1266,1240,13	3Hz,2H),6.44(	8,1H),6.91(d,J=8,1011,822,786cr	7Hz,

1HNMR(CDCl3) & 1.86(8,3H),3.45(8,3H),3.74(8,3H),4.54(8,2H),5.04(brs,1H),5.12(brs,1H),6.45(8,1H),6.91(d,J=8.7Hz,2H),6.9

IR(Nujol)3536,3364,3179,1614,1586,1524,1493,1407,1309,1284,1265,1238,1226,1115,1073,1011,887,821,782cm-1

6(m,2H),7.08(brs,1H),7.53(d,J=8.7Hz,2H)

1.95

Table 28

	HINMR(CDCB) 6 2.58(t,J=2.4Hz,1H),3.45(8,3H),3.74(8,3H),4.79(d,J=2.4Hz,2H),6.45(8,1H),6.92(d,J=8.7Hz,2H),6.98(dd,J=
1.96	8.4,2.1Hz,1H),7.07(d,J=8.4Hz,1H),7.09(d,J=2.1Hz,1H),7.53(d,J=8.7Hz,2H)
	IR(Nujol)3410,3282,1612,1589,1623,1489,1404,1226,1114,1011,1013,520cm
	111111111111111111111111111111111111
1.97	,J=8.6,2.011z,111),7.38(d,J=8.811z,2H),7.46(d,J=2.0Hz,111),7.55(m,2H),7.67(m,1H),7.68(d,J=8.8Hz,2H),7.99(m,2H)
	m.p.200-203°C
	111111111111111111111111111111111111
1.98	111),7.21(d,J=8.111z,211),7.34(d,J=8.111z,211),7.34(dd,J=8.7,2.411z,1H),7.38(d,J=8.7Hz,2H),7.40(d,J=2.4Hz,1H),7.68(d,J=8.7
	Hz,2H)
	[K(Nujol)1608, 1520, 1480, 1339, 1173, 1186, 107
	$^{1}\text{HNMR(CI)Cl}_{3}) \ \delta \ \ 2.72(\text{s},3\text{H}), 3.13(\text{s},3\text{H}), 3.21(\text{s},3\text{H}), 3.55(\text{s},3\text{H}), 3.78(\text{s},3\text{H}), 5.15(\text{s},2\text{H}), 6.84(\text{s},1\text{H}), 7.09(\text{d},J=8.7\text{Hz},1\text{H}), 7.12(\text{dd},J=8.7\text{Hz},1\text{H}), 7.12(\text{dd},J=8.7\text{Hz},1\text{H}), 7.12(\text{dd},J=8.7\text{Hz},1\text{H}), 7.12(\text{dd},J=8.7\text{Hz},1\text{H}), 7.12(\text{dd},J=8.7\text{Hz},1\text{Hz},1\text{Hz}), 7.12(\text{dd},J=8.7\text{Hz},1\text{Hz},1\text{Hz}), 7.12(\text{dd},J=8.7\text{Hz},1\text{Hz},1\text{Hz},1\text{Hz}), 7.12(\text{dd},J=8.7\text{Hz},1\text{Hz},1\text{Hz},1\text{Hz},1\text{Hz}), 7.12(\text{dd},J=8.7\text{Hz},1\text{Hz},1\text{Hz},1\text{Hz}), 7.12(\text{dd},J=8.7\text{Hz},1\text{Hz},1\text{Hz},1\text{Hz}), 7.12(\text{dd},J=8.7\text{Hz},1\text{Hz},1\text{Hz},1\text{Hz}), 7.12(\text{dd},J=8.7\text{Hz},1\text{Hz},1\text{Hz},1\text{Hz}), 7.12(\text{dd},J=8.7\text{Hz},1\text{Hz},1\text{Hz},1\text{Hz}), 7.12(\text{dd},J=8.7\text{Hz},1\text{Hz},1\text{Hz},1\text{Hz}), 7.12(\text{dd},J=8.7\text{Hz},1\text{Hz},1\text{Hz},1\text{Hz}), 7.12(\text{dd},J=8.7\text{Hz},1\text{Hz},1\text{Hz},1\text{Hz}), 7.12(\text{dd},J=8.7\text{Hz},1\text{Hz},1\text{Hz},1\text{Hz},1\text{Hz}), 7.12(\text{dd},J=8.7\text{Hz},1\text{Hz},1\text{Hz},1\text{Hz}), 7.12(\text{dd},J=8.7\text{Hz},1\text{Hz},1\text{Hz},1\text{Hz}), 7.12(\text{dd},J=8.7\text{Hz},1\text{Hz}$
1.99	,J=8.7,7.2112,1H),7.35(dd,J=8.7,2.1Hz,1H),7.38(d,J=8.7Hz,2H),7.40(d,J=2.1Hz,1H),7.46(dd,J=8.7,5.1Hz,1H),7.68(d,J=8.7H
	1,211)
	111111111111111111111111111111111111
1.100	,J=8.4,1.8Hz,1H),7.36(dd,J=8.4,1.8Hz,1H),7.38(d,J=8.7Hz,2H),7.42(d,J=1.8Hz,1H),7.45(d,J=1.8Hz,1H),7.59(d,J=8.4Hz,1H
	),7.68(d,J=8.7Hz,2H)
	m.p.103·105°C
	.HNMR(CDCl <sub>3</sub> ) δ 2.18(dd,J=1.5,1.2Hz,3H),3.45(s,3H),3.74(s,3H),4.79(dd,J=5.7,1.2Hz,2H),5.81(dt,J=5.7,1.5Hz,2H),5.45(s,
1.101	1H),6.92(d,J=8.7Hz,2H),6.95(s,1H),6.96(s,1H),7.07(s,1H),7.52(d,J=8.7Hz,2H)
	IR(KBr)3527,3328,2930,1614,1593,1523,1492,1463,1408,1262,1235,1225,1119,1072,1010,828,805cm-'

Table 29

	1	,			,	1			: : :	
	1.102	m.p.95-99°C 'HNMR(CDCl <sub>3</sub> ) & I(m,2H),7.04(d,J <sup>3</sup>	3.45(s,3H),3.74=1.8Hz,1H),7.53(	1(s,3H),4.67(s, (d,J=8.7Hz,2H	211),5.47(m,11	1),5.65(dd,J=	2.7,1.2Hz,1H	,6.45(s,1H),6	.92(d,J=8.	7Hz,2H),7.0
	1.103	111NMR(CDCl3) &	3.45(s,3H),3.7i	5(s,3H),4.59(d (d,J=8.7Hz,2I	,J=4.211z,211),	6.45(s, 11I),6.	46(m, 111),6.5i	5(d,J=12.9Hz,	, 111),6.92(0	1,J=8.7Hz,2
	1.104	41NMR(CDCl <sub>3</sub> ) ô 11D,6.46(s,11D,6.3	3.45(s,3H),3.75 91(d,J=8.711z,211	(8,3H),4.64(dc 1),6.96(brs,2H)	1,J=6.0and1.2 1,7.08(brs,111),	Hz,2H),6.23(7.58(d,J=8.7	dt,J=13.2and( Hz,2H)	3.0Hz, 1H),6.4	12(dt,J=13.	2nnd 1.2Hz,
	1.105	HAT, J=15.3, 6.0H	3.46(s,311),3.7t z,1H),6.45(s,1H),	5(8,311),3.98(d ,6.92(d,J=8.71	like,J=7.2Hz, lz,2H),6.95(s,	1H),4.64(d-li 1H),7.08(s,2E	ke,J=3.9Hz,1]	H),6.04(dt,J= 7Hz,2H)	15.3,4.8Hz	,1H),6.06(1
	1.106	foam 'HNMR(CDC! <sub>3</sub> ) ô H),5.70(s,1H),6.7d IR(KBr)3410,152	0 1.76(s,3H),1.86 0(dd,J=8.4,2.0H2 0,1476,1390,124;	3(s,3H),2.08(s, 1,1H),6.74(s,1F 3,1225,1101,1	3H),3.36(8,3H H),6.84(d,J=2.0	),3.71(s,3H), 0Hz,1H) 75cm <sup>-1</sup>	4.61(d,J=7.0H	[z,2H,),4.94(s	,1H),6.54(t	.,J=7.0Hz,1
	1.107	m.p.112-114°C 'HNMR(CDCl <sub>3</sub> ) δ H),7.38-7.51(m,5H IR(KBr)3512,295 1cm <sup>-1</sup>	3.03(s,3H),3.57 !),7.53(m,2H) 2,2936,1607,161	((s,3H),3.74(s,	3H),3.87(s,3H 382,1284,125	),4.90(S,2H), 3,1229,1216,	6.16(8,2H),5.6 1186,1156,11	3(brs, 1H),6.6	8(s, 1H),6.9	11-7.07(m,6 956,914,83
(d,J=8,4Hz,1H),7.34-7,41(m,4H),7.68(m,2H)	I-108	'HNMR(CDCl <sub>3</sub> ) δ d,J=8.4Hz,1H),7.3	2.20(d,J=1.2Hz	£,3H),2.76(8,31 68(m,2H)	H),3.22(8,3H),;	3.24(a,3H),3.l	56(8,3H),3.78(	8,3H),4.65(m,	,2H),5.96(n	n, 1H), 7.07(

Table 30

	m.p.153-164°C
-	11NMR(CDCB) δ 2.20(d, J=1.5Hz, 3H), 2.75(s, 3H), 3.21(s, 3H), 3.23(s, 3H), 3.56(s, 3H), 3.78(s, 3H), 4.81(m, 2H), 5.80(m, 1H), 6.84(
601:- 	8,111),7.10(d,J=8.1Hz,111),7.34-7.41(m,4H),7.68(m,2H)
	IR(KBr)1519,1481,1390,1364,1234,1177,1150,1119,1077,1011,969,945,876,816,799,521cm · '
	$^{1}\text{HNMR(CDC3a)} \ \delta \ \ 2.68(8,3H), 3.11(8,3H), 3.21(8,3H), 3.56(8,3H), 3.78(8,3H), 3.83(8,3H), 5.11(8,2H), 6.84(8,1H), 6.93(4,J=8.7Hz,J=8.7Hz), 6.84(8,J=8.7Hz,J=8.7Hz), 6.84(8,J=8.7Hz,J=8.7Hz), 6.84(8,J=8.7Hz), 6.84(8,J=8$
011.1	211),7.16(d,1=8.711z,111),7.35(dd,J=8.7,2.111z,111),7.36-7.40(m,511),7.68(d,J=8.7Hz,211)
	111NMR((3DC3) 3 2.78(4,3H), 3.22(4,6H), 3.55(4,3H), 3.78(8,3H), 5.23(4,2H), 6.85(6,1H), 7.08(4,J=8.7Hz,1H), 7.34(dd,J=8.7,2.1
	11z, 111), 7.39(d, J=8, 7Hz, 211), 7.42(d, J=2.111z, 111), 7.44(brs, 211), 7.68(d, J=8.7Hz, 211), 8.70(brs, 211)
	1HNMR(CDC13) & 2.70(s,3H),3.21(s,3H),3.24(s,3H),3.55(s,3H),3.78(s,3H),5.33(s,2H),6.84(s,1H),7.15(d,J=8.4Hz,1H),7.27(dd
1.112	,J=7.5,4.2Hz,1H),7.33(dd,J=8.4,2.4Hz,1H),7.38(d,J=8.7Hz,2H),7.42(d,J=2.4Hz,1H),7.62(brd,J=7.5Hz,1H),7.68(d,J=8.7Hz,2
	H), 7.76(ddd, J=7.5,7.5,1.8Hz,1H), 8.61(d, J=4.2Hz,1H)
	1HNMR(CDC!3) § 2.76(s,3H),3.15(s,3H),3.21(s,3H),3.55(s,3H),3.78(s,3H),5.22(s,2H),6.85(s,1H),7.17(d,J=8.4Hz,1H),7.38(dd
1.113	,J=8.4,2.1Hz,1HJ,7.38(m,1H),7.39(d,J=8.7Hz,2H),7.42(d,J=2.1Hz,1H),7.68(d,J=8.7Hz,2H),7.88(d,J=7.8Hz,1H),7.64(brs,1H)
	,8.73(brs,111)
	111NMR(CDCl <sub>3</sub> ) δ 3.45(9,3H),3.74(9,3H),5.10(9,2H),6.45(9,1H),6.91(d,J=8.7Hz,2H),6.95(dd,J=8.4,2.1Hz,1H),7.03(d,J=8.4Hz
1.114	1.114 1.11),7.08(d,J=2.111z,111),7.23(brd,J=7.8Hz,211),7.34(brd,J=7.8Hz,2H),7.53(d,J=8.7Hz,2H)
	IR(Nujol)3464,3344,1611,1581,1523,1490,1266,1113,1073,1011,1000,821,782cm <sup>-1</sup>
	1HNMR(CDCl <sub>3</sub> ) & 3.45(e,3H),3.75(e,3H),5.11(e,2H),6.45(e,1H),6.92(d,J=8.7Hz,2H),6.96(dd,J=8.4,2.1Hz,1H),7.01(d,J=8.4Hz
1.115	, 111),7.09(d,J=2.111z,111),7.11(dd,J=8.7,8.711z,211),7.42(dd,J=8.7,5.4Hz,211),7.54(d,J=8.7Hz,211)
	IR(Nujol)3560,3400,1612,1589,1522,1492,1260.1225,1116,1068,1006,992,841,826,803,786cm <sup>-1</sup>

Table 31

1.116	(HNMR(CDCh) 3 3.45(s,3H),3.75(s,3H),5.23(s,2H),6.45(s,1H),6.92(d,J=8.7Hz,2H),6.97(brs,2H),7.11(brs,1H),7.31(dd,J=8.4,1110,1112,1H),7.46(d,J=8.4Hz,1H),7.47(d,J=2.1Hz,1H),7.54(d,J=8.7Hz,2H)
1.117	**HINMR(CDCL <sub>3</sub> ) & 3.45(s,31D,3.75(s,311),3.84(s,311),5.07(s,211),6.45(s,111),6.92(d,3=8.711z,211),6.95(d,3=9.011z,211),6.96(dd,3=8.4,1.811z,111),7.04(d,3=8.41tz,111),7.08(d,3=1.811z,111),7.37(d,3=8.711z,211),7.53(d,3=9.01tz,211) **HIR (Nujol)3400,1612,1586,1516,1488,1246,1174,1113,1070,1011,823cm
1-118	11 NMR(DMSO-d <sub>6</sub> ) δ 3.29(s,311),3.64(s,311),5.20(s,211),6.39(s,111),6.64(dd,J=8.4,2.1Hz,111),6.79(d,J=2.1Hz,111),6.84(d,J=8.711z,211),6.92(d,J=8.41tz,111),7.43(d,J=8.711z,211),7.52(d,J=6.011z,211),8.59(d,J=6.011z,211) 1R(Nujol)3473,3441,1610,1582,1523,1493,1404,1241,1112,1074,1005,816,782cm <sup>-1</sup>
1.119	HINMR(CDCl <sub>3</sub> ) δ 3.45(s,3H),3.74(s,3H),5.27(s,2H),6.45(s,1H),6.92(dd,J=8.4,1.8Hz,1H),6.93(d,J=8.7Hz,2H),7.11(d,J=8.4Hz,1H),7.12(d,J=1.8Hz,1H),7.31(m,1H),7.36(brd,J=7.5Hz,1H),7.53(d,J=8.7Hz,2H),7.77(ddd,J=7.5,7.5,1.8Hz,1H),8.66(d,J=5.0 Hz,1H) Hz,1H) IR(Nujol)3555,3467,3342,1608,1597,1586,1522,1466,1210,1117,1080,1016,822,761cm <sup>-1</sup>
1.120	1HNMR(CDCl <sub>3</sub> ) δ 3.45(s,3H),3.74(s,3H),5.21(s,2H),6.46(s,1H),6.91(d,J=8.7Hz,2H),6.99(brs,2H),7.11(brs,1H),7.40(dd,J=7.5, 5.011z,1H),7.53(d,J=8.7Hz,2H),7.83(d,J=7.5Hz,1H),8.64(brd,J=5.0Hz,1H),8.74(brs,1H) IR(Nujol)3342,1609,1586,1522,1489,1253,1118,1074,1010,827,782cm <sup>-1</sup>
1.121	m.p.166-168°C <sup>1</sup> HNMR(CDCl <sub>3</sub> ) δ 3.45(s,3H),3.75(s,3H),4.77(d,J=6.3Hz,2H),6.22(t,J=6.3Hz,1H),6.93(d,J=8.7Hz,2H),6.93(d,J=8.7Hz,1H),6. <sup>1</sup> 98(dd,J=8.7,1.8Hz,1H),7.08(d,J=1.8Hz,1H),7.53(d,J=8.7Hz,2H) <sup>1</sup> 11(KBr)3474,3411,2957,2930,1615,1589,1569,1523,1492,1407,1286,1263,1230,1113,1070,825cm <sup>-1</sup>

Table 32

	m.p.190-192°C m.p.190-192°C m.n.n.m.p.(1973) 8 9 565 311) 3 566 311) 3 796 311) 5 17(8.211) 5.73(8.111) 6.84(8.111), 6.93(dd, J=8.1and1.9Hz,1H)
1.122	7.02(d,J=8.1112,111),7.05(d,J=1.9Hz,1H),7.37-7.45(m,1H),7.71(d,J=8.6Hz,2H)
	IR(KBr)3512, 1519, 1484, 1367, 1174, 1150, 1078, 957, 870, 798cm
	111111111111111111111111111111111111
1.123	71(d,J=8.711z,211),13.3-14.5(brs,111)
	IR(KBr):3422,1735,1702,1520,1471,1366,1175,1150,1118,971,954,863,807cm-1
	m.p.258-259°C(dec)
	IINMR(DMSO-da) 5 3.32(8,3H), 3.69(8,3H), 5.10(2H,8), 6.65(dd,J=8.4,2.1Hz,1H), 6.79(d,J=2.1Hz,1H), 6.86(d,J=8.4Hz,2H), 6.
1.124	90(s,1H),6.94(d,J=8.4Hz,1H),7.30-7.54(m,7H),8.98(s,1H),9.63(s,1H)
	IR(KBr):3437,3157,1702,1610,1590,1521,1474,1464,1379,1260,1245,1224,1061,1014,952,834,793,748,698cm <sup>-1</sup>
	HNMR(CDCl3) & 1.75(8,3H), 1.81(8,3H), 3.21(8,3H), 3.41(8,3H), 3.68(8,3H), 3.77(8,3H), 4.61(d, J=6.8Hz, 2H), 5.50(t, J=6.8Hz, 1H
1.125	), 6.93(8,114), 7.02(d, J=8.5Hz, 1H), 7.27(d, J=8.5, 2.3Hz, 1H), 7.33(dd, J=2.3Hz, 1H), 7.38(d, J=8.6Hz, 2H), 7.71(d, J=8.6Hz, 2H)
	HNMR(CDCl <sub>3</sub> ) & 1.75(s,3H), 1.81(s,3H), 3.41(s,3H), 3.65(s,3H), 3.76(s,3H), 4.59(d,J=6.6Hz,2H), 5.06(s,1H), 5.51(t,J=6.6Hz,1H
1.126	),5.67(s,1H),6.83(dd,J=8.4,2.1Hz,1H),6.87(s,1H),6.90-6.93(m,3H),6.98(d,J=2.1Hz,1H),7.54(d,J=9.0Hz,2H)
	m.p.116·117°C
	1HNMR(DMSO-d6) δ 1.72(8,3H),1.76(8,3H),3.32(8,3H),3.70(8,3H),4.53(d,J=7.1Hz,2H),5.48(t,J=7.1Hz,1H),6.65(dd,J=8.4,2.1
1.127	$H_{z_1}H_{1,6}$ , $73(d,J=2.1H_{z_1}H)$ , $6.86(d,J=8.6H_{z_1}2H)$ , $6.88(d,J=8.4H_{z_1}H)$ , $6.93(e,1H)$ , $7.47(d,J=8.6H_{z_1}2H)$ , $8.84(e,1H)$ , $9.62(e,1H)$ , $1.24(e,1H)$ , $1.24(e,1$
	1.9-13.4(brs,1H)
	IR(KBr):3446,1703,1611,1593,1520,1471,1380,1260,1225,1081,997,952,838cm <sup>-1</sup>

Table 33

	72	62		T	1 -	
10	)(3 <sub>13</sub> ) δ 1.65(s,3H),1.78(s,3H),2.96(s,3H),3.22(s,3H),3.25(s,3H)3.55(s,3H),3.79(s,3H),4.77(d,J=7.8Hz,2H),5.53(t,J ),6.87(s,1H),7.39&7.67(ABq,J=8.7Hz,4H),7.70(d,J=2.1Hz,1H),7.86(d,J=2.1Hz,1H),10.36(s,1H) (691,1473,1374,1230,1226,1209,1178,1152,1086,969,874,805cm <sup>-1</sup>	oil HINMR(CDCl <sub>3</sub> ) & 1.73(d,J=0.9Hz,3H),1.80(s,3H),2.89(s,3H),3.20(s,3H),3.22(s,3H),3.54(s,3H),3.79(s,3H),4.66(d,J=7.8Hz,2 H),4.77(s,2H),5.55(m,1H),6.85(s,1H),7.39&7.68(ABq,J=9.0Hz,4H),7.39(d,J=2.1Hz,1H),7.44(d,J=2.1Hz,1H) IR(CHCl <sub>3</sub> )1475,1372,1230,1178,1151,1085,969,874cm <sup>-1</sup>	m.p.189-190°C !HNMR(CDCl <sub>3</sub> )	3°C (Cl <sub>3</sub> ) δ 2.96(8,3H),3.18(6,3H),3.22(8,3H),3.56(8,3H),3.79(8,3H),5.28(8,2H),6.86(8,1H),7.38-7.44(m,7H),7.67(m,2H .1Hz,1H),7.83(d,J=2.1Hz,1H) 7,1512,1472,1365,1352,1234,1201,1180,1151,1082,971,947,870,846,810,794,703,523cm <sup>-1</sup>	1°C Cl <sub>3</sub> ) 5 1.68(s,3H),1.74(s,3H),2.80(s,3H),3.22(s,3H),3.28(s,3H),3.56(s,3H),3.62(d,J=7.8Hz,2H),3.78(s,3H),5.31(m, H),7.34(dd,J=8.1Hz,J=1.8Hz,1H),7.39&7.68(ABq,J=8.7Hz,4H),7.43(d,J=8.1Hz,1H),7.46(d,J=1.8Hz,1H) 4,1362,1180,1151,1076,1014,968,944,870,816,799,521cm <sup>-1</sup>	'HNMR(CDCl <sub>3</sub> ) & 1.73(d,J=0.9Hz,3H),1.82(s,3H),3.44(s,3H),3.75(s,3H),4.54(d,J=6.9Hz,2H),4.78(s,2H),5.30(s,1H),5.61(m,1 H),5.67(s,1H),6.01(s,1H),6.45(s,1H),6.92&7.52(ABq,J=8.7Hz,4H),7.02(d,J=2.1Hz,1H),7.05(d,J=2.1Hz,1H) IR(KBr)3428,1612,1522,1483,1458,1403,1362,1334,1304,1266,1226,1174,1116,1083,1024,970,938cm <sup>-1</sup>
15	)(!) & 1.65(s,3H),1.78(s,3H),2.96(s,3H),3.22(s,3H),3.25(s,3H)3.55(s,3H),3.79(s,3H),4.77(d,J=,6.87(s,1H),7.39&7.67(Albq,J=8.7Hz,4H),7.70(d,J=2.1Hz,1H),7.86(d,J=2.1Hz,1H),10.36(s,1H),691,1473,1374,1230,1226,1209,1178,1152,1086,969,874,805cm <sup>-1</sup>	)Cl <sub>3</sub> ) & 1.73(d,J=0.9Hz,3H), 1.80(s,3H),2.89(s,3H),3.20(s,3H),3.22(s,3H),3.54(s,3H),3.79(s,3H),7.1),6.85(s,1H),7.39&7.68(ABq,J=9.0Hz,4H),7.39(d,J=2.1Hz,1H),7.44(d,J=2.1Hz,1H),475,1372,1230,1178,1151,1085,969,874cm	3(s, 1H), 7.36-7.42	i(s, 1H), 7.38-7.44	1°C (Cl.) 5 1.68(s,3H), 1.74(s,3H), 2.80(s,3H), 3.22(s,3H), 3.28(s,3H), 3.56(s,3H), 3.62(d,J=7.8Hz,2H), 3.78(s,3H) (H),7.34(dd,J=8.1Hz,J=1.8Hz,1H),7.39&7.68(ABq,J=8.7Hz,4H),7.43(d,J=8.1Hz,1H),7.46(d,J=1.8Hz,1H) 4,1362,1180,1151,1076,1014,968,944,870,816,799,521cm <sup>-1</sup>	Cl <sub>3</sub> ) δ 1.73(d,J=0.9Hz,3H),1.82(s,3H),3.44(s,3H),3.75(s,3H),4.54(d,J=6.9Hz,2H),4.78(s,2H),5. l),6.01(s,1H),6.45(s,1H),6.92&7.52(ABq,J=8.7Hz,4H),7.02(d,J=2.1Hz,1H),7.05(d,J=2.1Hz,1H) 8,1612,1522,1483,1458,1403,1362,1334,1304,1266,1226,1174,1116,1083,1024,970,938cm <sup>-1</sup>
20	1)3.55(s,3H),3.79 ),7.86(d,J=2.1Hz	),3.22(s,3H),3.54 4,J=2.1Hz,1H),7.	l),3.79(a,3H),6.86	m.p.147-148°C HINMR(CIDCL <sub>3</sub> ) δ 2.95(s,3H),3.18(s,3H),3.22(s,3H),3.55(s,3H),3.79(s,3H),5.28(s,2H),6.86(s,1H),7.38-7 ),7.75(d,J=2.1Hz,1H),7.83(d,J=2.1Hz,1H) IR(KBr)1687,1512,1472,1365,1352,1234,1201,1180,1151,1082,971,947,870,846,810,794,703,523cm <sup>-1</sup>	),3.56(s,3H),3.62 H),7.43(d,J=8.1F	<sup>1</sup> HNMR(CDCl <sub>3</sub> ) & 1.73(d,J=0.9Hz,3H),1.82(s,3H),3.44(s,3H),3.75(s,3H),4.54(d,J=6.9Hz,2H),4.78(s,2H),1.5.67(s,1H),6.01(s,1H),6.45(s,1H),6.92&7.52(ABq,J=8.7Hz,4H),7.02(d,J=2.1Hz,1H),7.05(d,J=2.1Hz,1H),1.11(KBr)3428,1612,1522,1483,1458,1403,1362,1334,1304,1266,1226,1174,1116,1083,1024,970,938cm <sup>-1</sup>
25	(s,311),3.25(s,31 (d,J=2.1Hz,111 86,969,874,805	,3H),3.20(s,3H)	8,3H),3.56(8,3H	s,3H),3.79(e,3H)	,3H),3.28(8,3H) ABq,J=8.7Hz,4 ,799,521cm <sup>-1</sup>	3H),3.76(8,3H), Hz,4H),7.02(d, 1266,1226,117
30	2.96(s,3H),3.22 8.7Hz,4H),7.70 9,1178,1162,10	80(s,311),2.89(s &7.68(A13q,J=9 5.969.874cm	.22(s,3H),3.30(	.22(s,3H),3.65(	80(s,3H),3.22(e IH),7.39&7.68( 68,944,870,816	2(8,3H),3.44(8,37.52(ABq,J=8.7362,1334,1304,
35	9H), 1.78(s,3H), 5 9&7.67(ABq, J= 1230, 1226, 120	J=0.9Hz,3H), 1.3.85(s, 111), 7.398	H),2.81(s,3H),3	H),3.18(e,3H),3 I,J=2.1Hz,1H) 66,1352,1234,1	1),1.74(s,3H),2. .1Hz,J=1.8Hz,1 51,1076,1014,9	=0.9Hz,3H),1.8 15(s,1H),6.92&' 83,1458,1403,1:
40	)(!.) \(\delta\)   1.65(s,3H),1.78(s,3H),2.96(s,3H),3.22(s,3H),3.25(s,3H)3.55 1.6.87(s,1H),7.39&7.67(Albq,J=8.7Hz,4H),7.70(d,J=2.1Hz,1H),7.86 691,1473,1374,1230,1226,1209,1178,1152,1086,969,874,805cm <sup>-1</sup>	)(1,1) & 1.73(d,J=0.9Hz,3H),1.80(s,3H),2.89(H),5.55(m,1H),6.85(s,1H),7.39&7.68(Albq,J=475,1372,1230,1178,1151,1085,969.874cm	m.p.189-190°C <sup>1</sup> HNMR(CDCl <sub>3</sub> ) δ 1.36(9,9H),2.81(8,3H),3.22(8,3H),3.30(8,3H),3.56(9,3H),3. <sup>1</sup> 8Hz,1H),7.67-7.72(m,3H) <sup>1</sup> 1R(KBr)1472,1363,1331,1179,1153,1082,961,950,877,846,817,791,526cm <sup>-1</sup>	m.p.147-148°C 'HINMR(CDCL <sub>3</sub> ) δ 2.95(8,3H),3.18(8,3H),; ),7.75(d,J=2.1Hz,1H),7.83(d,J=2.1Hz,1H) IR(KBr)1687,1512,1472,1365,1352,1234,	IC Cl <sub>3</sub> ) 5 1.68(s,3H),1.74(s,3H),2.80(s,3H),3.22(s,3H),3.28(s,3H H),7.34(dd,J=8.1Hz,J=1.8Hz,1H),7.39&7.68(ABq,J=8.7Hz,4,1362,1180,1151,1076,1014,968,944,870,816,799,521cm <sup>-1</sup>	Cl <sub>3</sub> ) & 1.73(d,J) ),6.01(s,1H),6.4 1,1612,1522,148
45	oil HINMR(CI =7.8Hz,1H) IR(CHCls)1			m.p.147-148°C IIINMR(CDCI) ),7.75(d,J=2.11 IR(KBr)1687,1	m.p.122-124 <sup>1</sup> HNMR(CD0 1H),6.85(9,1] IR(KBr)1474	
50	1.128	1.129	1.130	1.131	1.132	1.133

Table 34

	m.p.167-168°C
	$HINMR(CD(CH_3) \ \delta  1.39 (d,J = 1.2 Hz, 3 H), 1.70 (s, 3 H), 3.36 (d,J = 8.1 Hz, 2 H), 3.45 (s, 3 H), 3.74 (s, 3 H), 4.98 (s, 1 H), 5.29 (m, 1 H), 5.96 (s, 1 H), 1.29 (s, 2 H), 1.29 (m, 2 H), 1.29 ($
761	H),6.45(s, 111),6.78(s, 111),6.93&7.54(ABq,J=8.7Hz,4H),6.96(dd,J=7.8Hz,J=1.8Hz,1H),7.09(d,J=1.8Hz,1H),7.49(d,J=7.8Hz,1
F: 134	£13
	IR(KBr)3413,3365,2931,1611,1552,1520,1502,1475,1455,1441,1402,1360,1323,1262,1227,1206,1182,1170,1162,1114,1100
	,1081,1052,1014,941,835,816,587,542cm <sup>1</sup>
	m.p.183-184°C
3	$ \text{HINMR}(\text{CDCL}_3) \ \delta \ 3.46(\text{s},3\text{H}), 3.74(\text{s},3\text{H}), 3.83(\text{s},3\text{H}), 4.78(\text{m},2\text{H}), 5.99(\text{m},1\text{H}), 6.44(\text{m},1\text{H}), 6.45(\text{s},1\text{H}), 6.92(\text{d},J=8.7\text{Hz},2\text{H}), 6.94(\text{m},1\text{H}), 6.46(\text{m},1\text{H}), 6.46(\text{s},1\text{H}), 6.92(\text{d},J=8.7\text{Hz},2\text{H}), 6.94(\text{m},1\text{H}), 6.46(\text{m},1\text{H}), 6.46(\text{m},1\text{H}$
1.135	dd,J=8.1,1.8Hz,1H),7.00(d,J=8.1Hz,1H),7.10(d,J=1.8Hz,1H),7.53(d,J=8.7Hz,2H)
	IR(KBr)3383,2929,1699,1523,1491,1405,1262,1236,1206,1173,1116,1071,1011,822cm-1
	11 HNMR(CD <sub>3</sub> OD) δ 1.26(s, 3H), 1.29(s, 3H), 3.38(s, 3H), 3.68(s, 3H), 3.80(dd, J=8.4, 2.7 Hz, 1H), 3.96(dd, J=9.6, 8.4 Hz, 1H), 4.34(dd, J=0.5, 0.5, 0.5, 0.5, 0.5, 0.5, 0.5, 0.5,
90.	=9.6,2.7Hz,111),6.44(8,1H),6.80(dd,J=8.1,1.8Hz,1H),6.85(d,J=8.7Hz,2H),6.86(d,J=1.8Hz,1H),7.96(d,J=8.1Hz,1H),7.46(d,J=
1.130	8.7Hz,2H)
	IR(Nujol)3367,1612,1588,1523,1489,1254,1226,1115,1072,1013,940,814cm <sup>-1</sup>
	111NMR(CD3(D) 5 3.38(s,3H),3.68(s,3H),4.02(dd,J=11.0,3.6Hz,1H),4.12(dd,J=11.0,1.8Hz,1H),5.48(dd,J=3.6,1.8Hz,1H),6.4
1.137	3(8,1H), 6.83.6.87(m,3H), 6.85(d, J=8.7Hz,2H), 7.46(d, J=8.7Hz,2H)
	IR(Nujol)3410,1612,1588,1622,1487,1269,1231,1114,1071,1011,947,824cm <sup>-1</sup>
	$"HNMR(CD_3OD) \ \delta \ \ 3.38(s,3H), 3.68(s,3H), 4.70(d,J=5.4Hz,2H), 6.43(s,1H), 6.80(dd,J=8.1,2.1Hz,1H), 6.85(d,J=8.4Hz,2H), 6.88(d,J=8.1,2.1Hz,1H), 6.85(d,J=8.4Hz,2H), 6.88(d,J=8.1,2.1Hz,1H), 6.85(d,J=8.1,2.1Hz,1H), 6.86(d,J=8.1,2.1Hz,1H), 6.86(d,J=8.1,2.1Hz,1H), 6.86(d,J=8.1,2.1Hz,1H), 6.88(d,J=8.1,2.1Hz,1H), 6.88(d,J=8.1,2.1Hz,1Hz,1H), 6.88(d,J=8.1,2.1Hz,1Hz,1Hz,1Hz,1H), 6.88(d,J=8.1,2.1Hz,1Hz,1Hz,1Hz,1Hz,1Hz,1Hz,1Hz,1Hz,1Hz,$
1.138	d,J=2.1Hz,1H),6.98(d,J=8.1Hz,1H),7.46(d,J=8.4Hz,2H),7.62(t,J=5.4Hz,1H)
	IR(Nujol)3368,1612,1689,1623,1489,1253,1226,1114,1072,1011,940,825cm-1
	"HNMR(CDCL <sub>1</sub> ) & 3.45(8,3H),3.74(8,3H),3.92(8,3H),4.75(d,J=5.1Hz,2H),6.45(8,1H),6.91(d,J=8.7Hz,2H),6.92(d,J=6.0Hz,1H),
I.139	7.00(dd,J=6.0,1.8Hz,1H),7.09(d,J=1.8Hz,1H),7.52(d,J=8.7Hz,2H),7.58(t,J=5.1Hz,1H)
	IR(Nujol)3399,1612,1589,1623,1489,1262,1226,1115,1072,1043,1014,941,825cm <sup>-1</sup>

### Table 35

55

50	45	40	35	30	25	. 20	15	10	5
1.140	<sup>1</sup> HNMR(CD <sub>3</sub> OD)) δ 3.38(s,3H),3.68(s,3H),4.51(s,2H),4.71(d,J=5.4Hz,2H),6.43(s,1H),6.80(dd,J=8.4,2.1Hz,1H),6.85(d,J=8.4Hz,2H),6.87(d,J=2.1Hz,1H),6.98(d,J=8.4Hz,1H),7.46(d,J=8.4Hz,2H),7.75(t,J=5.4Hz,1H)  [R(Nujol)3384,1611,1588,1623,1489,1252,1227,1115,1072,1014,824,758cm <sup>-1</sup> ]	3.38(s,3H),3.68 Hz,1H),6.98(d,J: 1,1588,1523,148	(s,3H),4.51(s, =8.4Hz,1H),7. 89,1252,1227,	2H),4.71(d,J=( 46(d,J=8.4Hz, 1115,1072,101	1.4Hz,2H),6.43(2H),7.7f(t,J=5.4,824,758cm	8, 1H),6.80(dd, 4Hz, 1H)	J=8.4,2.1H	z,1H),6.85(d,J=	-8.4H
1-141	4HNMR(CDCh) 5 3.45(9,3H),3.74(8,3H),4.76(4,J=5.1Hz,2H),5.15(8,2H),6.46(8,1H),6.86(4,J=8.4Hz,1H),6.92(4,J=8.7Hz,2H),6.94(dd,J=8.4,2.1Hz,1H),7.08(d,J=2.1Hz,1H),7.31.7.40(m,5H),7.53(d,J=8.7Hz,2H),7.65(t,J=5.1Hz,1H)  [R(Nujol)3399,1611,1588,1523,1489,1251,1225,1115,1072,1013,940,825cm <sup>-1</sup> ]	3.45(s,3H),3.74( Iz,1H),7.08(d,J= 1,1588,1523,148	8,3H),4.76(d,J 2.1Hz,1H),7.3 19,1251,1225,	=5.111z,211),5. 1-7.40(m,5H),' 1115,1072,101	15(s,2H),6.45(s 7.53(d,J=8.7Hz 3,940,825cm <sup>-1</sup>	,1H),6.86(d,J= ,2H),7.65(t,J=	8.4Hz,1H) 5.1Hz,1H)	,6.92(d,J=8.7Hb	,2H),
1.142	11NMR(C3D33D1;1) & 3,26(4,3H),2,64(m,4H),3,13(m,4H),3,44(4,3H),3,73(6,3H),4,78(d,J=4,5Hz,2H),6,45(6,1H),6.90( d,J=8,7Hz,2H),6,90(dd,J=8,4,2,1Hz,1H),6,99(d,J=2,1Hz,1H),7,00(d,J=8,4Hz,1H),7,12(t,J=4,5Hz,1H),7,49(d,J=8,7Hz,2H) IR(Nujol)3492,3297,1607,1561,1523,1486,1247,1224,1113,1011,957,828,799cm <sup>-1</sup>	3,26 0(dd,J=8.4,2.1H: 7,1607,1561,152	(н,:1H),2.6-I(m, z,1H),6.99(d,J :3,1486,1247,	-2.1Hz,1H),7. -2.1Hz,1H),7. 1224,1113,101	1),:1.44(H,:111),:3. 00(d,J=8.4Hz,1. 1,957,828,799c	7:3(s,311),4.78( H),7.12(t,J=4.; m <sup>-1</sup>	tl,J=4.6Hz, 5Hz,1H),7.	,211),6.45(s,111) 49(d,J=8.7Hz,2	6.90( H)
1-143	1HNMR(CDCh) \$\delta\$ 3.09(m,4H),3.45(s,3H),3.74(s,3H),3.86(m,4H),4.82(d,J=4.2Hz,2H),6.44(s,1H),6.92(d,J=8.7Hz,2H),6.98(dd ,J=8.4,1.8Hz,1H),7.00(t,J=4.2Hz,1H),7.04(d,J=8.4Hz,1H),7.07(d,J=1.8Hz,1H),7.53(d,J=8.7Hz,2H)  IR(Nujol)3366,1611,1586,1523,1488,1268,1227,1114,1070,1011,823cm^1	3.09(m,4H),3.45 7.00(t,J=4.2Hz,H 1,1586,1523,148	(s,3H),3.74(s,5 H),7.04(d,J=8. 18,1268,1227,1	311),3.86(m,411 411z,111),7.07( 1114,1070,101	),4.82(d,J=4.2F d,J=1.8Hz,1H), 1,823cm <sup>-1</sup>	[z,2H),6.44(s,17.53(d,J=8.7H	H),6.92(d,ez,2H)	J=8.7Hz,2H),6.9	pp)8(
1.144	<sup>1</sup> HNMR(CDCl <sub>3</sub> ) δ 1.29(t,J=6.9Hz,3H),2.65(dd,J=15.9,6.6Hz,1H),2.81(dd,J=15.9,6.6Hz,1H),3.44(s,3H),3.75(s,3H),4.03(dd,J=11.4,6.9Hz,1H),4.26(ddt,J=6.9,6.6,2.4Hz,1H),6.44(s,1H),6.92(d,J=8.7Hz,2H),6.96.7.01(m,3H),7.53(d,J=8.7Hz,2H)	1.29(t,J=6.9Hz, .20(q,J=6.9Hz,2] 7.53(d,J=8.7Hz	3H),2.65(dd,J H),4.35(dd,J= ,2H)	=15.9,6.6Hz,11	H),2.81(dd,J=1  ),4.66(ddt,J=6	5.9,6.6Hz,1H), 9,6.6,2.4Hz,1H	3.44(s,3H), 1),6.44(s,1	.3.75(8,3H),4.03 H),6.92(d,J=8.7	(dd,J
1-145	oil !HNMR(CDCl <sub>3</sub> )	1.68(s,3H),1.74 3.45(s,1H),6.92& 1.1490,1475,1463	(d,J=0.9Hz,3F 7.53(ABq,J=8 .1454,1402,13	1),2.55(m,2H), .7Hz,4H),7.02( 104,1269,1231,	3.44(s,3H),3.75 m,1H),7.17-7.2 1112,1072,101	(s,3H),4.04(t,J (2(m,2H) 9,827cm <sup>-1</sup>	=7.2Hz,2F	I),4.97(brs, 1H),	5.23(

Table 36

m.p.256-257°C HINMR(DMSO-da) & 3.35(s,3H),3.44(s,3H),3.74(s,7) HIKKBr):3479,3360,1672,1517,1465,1361,1339,1293 m.p163-164°C HINMR(CDCla) & 1.74(s,3H),1.81(s,3H),3.43(s,3H), HIKKBr):3533,3412,3350,1655,1609,1588,1519,1469 HIKKBr):3533,3412,3350,1655,1609,1588,1519,1469 HIKKBr):3533,3412,3350,1655,1609,1588,1519,1469 HINMR(CDCla) & 2.88(s,3H),3.22(s,3H),3.54(s,3H), HINMR(CDCla) & 1.80(s,3H),1.85(s,3H),3.43(s,3H), HINMR(CDCla) & 1.80(s,3H),1.85(s,3H),3.43(s,3H), HINMR(CDCla) & 1.76(s,3H),1.81(s,3H),2.63(s,3H), HINMR(CDCla) & 1.76(s,3H),1.81(s,3H),2.63(s,3H), HINMR(CDCla) & 1.58(s,3H),1.81(s,3H),2.63(s,3H), HINMR(CDCla) & 1.58(s,3H),1.81(s,3H),7.61-7.4 HINMR(CDCla) & 3.50(s,3H),1.81(s,3H),7.36(d,d,J-1152),1485,1464,1397,1233 HINMR(CDCla) & 3.50(s,3H),3.77(s,3H),5.15(s,2H),7.07(s,1H),6.98(d,J-8.4Hz,1H),7.07(s,1H),7.09(d,d,J-1152),1462,141,7.07(s,1H),7.09(d,d,J-1152),141,7.07(s,1H),7.09(d,d,J-1152),141,111,111,111,111,111,111,111,111,11		
	1	m.p.256-257°C 4HNMR(DMSO-da) & 3.35(8,3H),3.44(8,3H),3.74(8,3H),5.22(8,2H),7.06(8,1H),7.28-7.56(m,11H),7.69(8,1H),7.76(d,J=8.6Hz,2
	1-140	H) IR(KBr):3479,3360,1672,1517,1465,1361,1339,1295,1261,1228,1172,1144,1118,1013,957,870,862,804,751cm <sup>1</sup>
		m.p163-164°C 111NMR(CDCls) & 1.74(s,311), 1.81(s,311), 3.43(s,311), 3.74(s,311), 4.58(d,J=6.811z,211), 5.50(t,J=6.811z,111), 5.80(s,111), 6.37(s,111
	1.147	),6.86-6.95(m,511),6.90(d,J=8.6Hz,2H),6.99(s,1H),7.49(d,J=8.6Hz,2H) HR(KBr):3533,3412,3350,1655,1609,1588,1519,1469,1373,1274,1245,1227,1131,1082,1060,999,954,838cm <sup>-1</sup>
	1 1 48	1HNMR(CDCl3) & 2.88(9,3H),3.22(8,3H),3.54(8,3H),3.77(8,3H),5.35(m,2H),6.85(8,1H),7.24(d,J=9.0Hz,1H),7.39(d,J=8.7Hz,2
	1.140	11), 7.42-7.46(m, 5H), 7.65(d.d, J=9.0&2.1Hz, 1H), 7.68(d, J=8.7Hz, 2H), 8.26(d, J=2.1Hz, 1H)
<u> </u>	21.1-1	
		HINMR(CDCH) 3 1.76(8,311), 1.81(8,311), 2.63(8,311), 3.21(8,311), 3.56(8,311), 3.77(8,311), 4.62(d,J=6.3Hz,2H), 4.73(8,2H), 5.50(t,J=6.3Hz,2H), 4.73(8,2Hz,2H), 5.50(t,J=6.3Hz,2H), 4.73(8,2Hz,2H), 5.50(t,J=6.3Hz,2H), 4.73(8,2Hz,2H), 5.50(t,J=6.3Hz,2H), 5.50(t,J=6.3Hz,2Hz
	1.150	
		IR(KBr)3432, 1607, 1512, 1479, 1364, 1234, 1176, 1151, 1079, 1016cm <sup>-1</sup>
		111NMIK(CDCh) & 1.58(8,311), 1.81(8,311), 3.45(8,311), 3.73(8,311), 4.61(d, J=6.6Hz, 2H), 4.72(8, 2H), 5.52(t, J=6.6Hz, 1H), 6.45(9, 1H)
IR(KBr)3580,3411,1611,1521,1485,1464,1397,123; 'HNMR(CDCl <sub>3</sub> ) δ 3.50(s,3H),3.77(s,3H),5.15(s,2H 1-152 97(s,1H),6.98(d,J=8.4Hz,1H),7.07(s,1H),7.09(d.d,J	1.151	
1.152 97(8,1H),6.98(d,J=8.4Hz,1H),7.07(8,1H),7.09(d.d,J		
1.152 97(8,1H),6.98(d,J=8.4Hz,1H),7.07(8,1H),7.09(d.d,J		1HNMR(CDCl3) & 3.50(s,3H),3.77(s,3H),5.15(s,2H),5.72(s,1H),6.03(s,2H),6.71(d.d,J=8.4&2.1Hz,1H),6.91(d,J=8.4Hz,1H),6.
	1.152	1.152   97(8,1H), 6.98(d, J=8.4Hz, 1H), 7.07(8,1H), 7.09(d, d, J=8.4&2.1Hz,1H), 7.16(d, J=2.1Hz,1H), 7.34-7.50(m, 5H), 989(8,1H)
IR(KBr)3446,1697,1587,1511,1470,1383,1285,124		IR(KBr)3446,1697,1587,1511,1470,1383,1285,1240,1127,1036cm <sup>-1</sup>

Table 37

55

50	45	<b>4</b> 0	. 35	30	<b>25</b>	20	15	10	5
1.153	HINMR(CDCh)   5 3.78(s,3H),3.79(s,3H),4.87(s,1H),5.16(s,2H),5.70(s,1H),6.88-6.91(m,2H),6.97(s,1H),7.00(s,1H),6.99(d,J=8   Aliz,1H),7.23(d,J=2.1Hz,1H),7.34-7.49(m,7H)	3.78(s,3H),3.7 ,J=2.1,8.4Hz,1H	9(s,3H),4.87( 1),7.23(d,J=2.	8,1H),5.16(8,2l 1Hz,1H),7.34	H),5.70(s,1H)	),6.88-6.91(m,2	.H),6.97(s,1H	),7.00(s,1H),6	8=f'p)66'
1.154	111NMR(CDCh,) & 1.69(s,311), 1.74(s,311), 2.51-2.58(m,211), 3.19(s,311), 3.21(s,311), 3.80(s,311), 3.80(s,311), 4.07(t,J=6.9Hz,2H), 5.18-5.27(m,111), 6.92(s,111), 6.95(s,111), 7.05(d,J=8.711z,111), 7.32-7.37(m,211), 7.49(dd,J=2.1,8.711z,111), 7.58(d,J=2.111z,111), 7.69(m,211)	) 1.69(s,3H),1.7 92(s,1H),6.95(s,	4(8,3H),2.51. <sup>.</sup> 1H),7.05(d,J=	2.58(m,2H),3.1 :8.7Hz,HH),7.3	19(s,3H),3.21 12-7.37(m,2H	(a,3H),3.79(a,3 ),7.49(ḍd,J=2.	II),3.80(s,3H	),4.07(t,J=6.9 7.58(d,J=2.1H	Hz,2H),5.
1-155	HINMR(CDCl <sub>3</sub> ) \(\delta\) 1.69(s, 3H), 1.75(s, 3H), 2.53(q, J=6.9Hz, 2H), 3.77(s, 3H), 3.78(s, 3H), 4.07(t, J=6.9Hz, 2H), 4.97(s, 3H), 5.20-5.25 (m, 1H), 5.71(s, 1H), 6.87-6.93(m, 3H), 7.07(dd, J=1.8, 8.4Hz, 1H), 7.20(d, J=1.8Hz, 1H), 7.45-7.50(m, 2H)	(Cl <sub>3</sub> ) & 1.69(s,3H), 1.75(s,3H),2.53(q,J=6.9Hz,2H),3.77(s,3H),3.78(s,3H),4.07(t,J=6.9H: ((s,1H),6.87-6.93(m,3H),7.07(dd,J=1.8,8.4Hz,1H),7.20(d,J=1.8Hz,1H),7.46-7.50(m,2H)	5(s,3H),2.53(H),7.07(dd,J=	q,J=6.911z,2H) 1.8,8.411z,111),	,3.77(s,3H),3 ,7.20(d,J=1.8	3.78(s,3H),4.07 Hz, HI),7.46-7	(t,J=6.9Hz,2 .50(m,2H)	Н),4.97(я,3Н),	6.20-5.25
1.156		2.76(s,3H),3.1 Hz,1H),7.37-7.4' 0,1415,1391,130	9(s,3H),3.22( 7(m,7H),7.68( 33,1233,1178,	8,3H),3.54(8,3) (m,2H) 1151,1079,103	H),3.79(6,3H	),5.20(8,2H),5.0 75,801,522cm	68(s,1H),6.84	(e,1H),6.97(d,	J=1.8Hz,
1-157	m.p.176-178°C 1HNMR(CDCl <sub>3</sub> ) & 2.08(s,3H),2.40,(s,3H),2.72(s,3H),3.21(s,3H),3.22(s,3H),3.55(s,3H),3.79(s,3H),5.13(s,2H),6.86(s,1H),7.39a nd7.68(ABq,J=8.7Hz,4H),7.47(d,J=2.1Hz,1H),7.49(d,J=2.1Hz,1H) IR(KBr)1770,1747,1477,1391,1366,1235,1180,1152,1077,873,799,522cm <sup>-1</sup>	3°C (Cl <sub>3</sub> )	),(s,3H),2.72(s) J=2.1Hz,1H), 36,1235,1180,	3,3H),3.21(s,3F 7.49(d,J=2.1H 1152,1077,873	1),3.22(8,3H) z,1H) 3,799,522cm	,3.55(8,3H),3.7	'9(8,3H),5.13	(s,2H),6.86(s,1	IH),7.39a
1-158	m.p.175-177°C <sup>1</sup> HNMR(CDCl <sub>3</sub> ) & 2.87(s,3H),3.13(s,6H),3.22(s,3H),3.55(s,3H), m,2H),7.67(m,2H) <sup>1</sup> R(Kl <sub>3</sub> r)1479,1367,1180,1151,1080,1019,966,876,798,525cm <sup>-1</sup>	2.87(s,3H),3.13(s,6H),3.22(s,3H),3.55(s,3H),3.81(s,3H),5.22(s,2H),6.86(s,1H),7.38-7.45(m,7H),7.51-7.53( ) 7,1180,1151,1080,1019,966,876,798,525cm <sup>-1</sup>	3(s,6H),3.22(	s,3H),3.55(s,3l	H),3.81(s,3H)	),5.22(8,2H),6.0	86(a, 1H),7.38	.7.46(m,7H),7	.51-7.53(

Table 38

1.159	foam HINMR(CDCh,) & 2.44(a,3H),3.21(a,3H),3.54(a,3H),3.76(a,3H),3.79(a,3H),4.77(a,2H),5.24(a,2H),6.83(a,1H),6.90-7.00(m,3H), 7.30-7.48(m,5H),7.37(d,J=8.8Hz,2H),7.69(d,J=8.8Hz,2H) IR(KBr):1758,1519,1481,1365,1236,1176,1150,1079,1013,963,872,798cm <sup>-1</sup>
1.160	m.p146-147℃ 11INMR(DMSO-dc) δ 3.31(a,3H),3.65(a,3H),4.63(a,2H),5.15(a,2H),6.40(a,1H),6.83-6.90(m,4H),7.05(d,J=8.4Hz,1H),7.32-7.52 (m,7H),8.57(a,1H),9.50(a,1H),12.0-13.9(brs,1H) 1R(KBr):3422,1728,1611,1524,1489,1455,1405,1247,1142,1118,1080,1012,818,749,742,698cm <sup>-1</sup>
191-1	1HNMR(CDCh) & 1.76(8,3H),1.79(8,3H),2.57(8,3H),3.21(8,3H),3.56(8,3H),3.77(8,3H),3.80(8,3H),4.64(d,J=6.5Hz,2H),4.74(8,2H),5.54(t,J=6.5Hz,1H),6.83(8,1H),6.88(d,J=1.5Hz,1H),7.02-7.03(m,2H),7.38(d,J=8.7Hz,2H),7.69(d,J=8.7Hz,2H)
1.162	m.p.147-149°C <sup>1</sup> HNMR(DMSO-d <sub>6</sub> ) & 1.73(a,3H),1.77(a,3H),3.30(a,3H),3.65(a,3H),4.57(d,J=6.6Hz,2H),4.60(a,2H),5.86(t,J=6.6Hz,1H),6.40(a, <sup>1</sup> H),6.80(d,J=1.7Hz,1H),6.84(d,J=8.7Hz,2H),6.87(dd,J=8.7Hz,1H),6.99(d,J=8.7Hz,1H),7.43(d,J=8.7Hz,2H),8.56(a,1H),9.51(a,1H),12.8(brs,1H) <sup>1</sup> H1),12.8(brs,1H) <sup>1</sup> H1),12.8(brs,1H) <sup>1</sup> H1(KBr):3483,3376,1737,1612,1523,1489,1460,1397,1271,1231,1175,1120,1072,1012,904,820cm <sup>-1</sup>
1.163	m.p.144-145°C 'HINMR(CDCl <sub>3</sub> ) δ 3.04(s,3H),3.20(s,3H),3.59(s,3H),3.75(s,3H),4.90(s,2H),5.16(s,2H),5.65(s,1H),6.67(s,1H),6.92(dd,J=2.1,8. 1-163 4Hz,1H),7.00(d,J=8.4Hz,1H),7.06(d,J=2.1Hz,1H),7.26-7.47(m,7H),7.61-7.66(m,2H) IR(KBr)3600-3200(br),1517,1449,1382,1361,1277,1235,1199,1150,1112,1079,1064,1010,997cm <sup>-1</sup>
1.164	m.p.80-83°C <sup>1</sup> HNMR(CDCl <sub>3</sub> )

Table 39

1.165	m.p.148-151% HINMR(CDCl <sub>3</sub> ) & 3.03(s,3H),3.57(s,3H),3.74(s,3H),4.89(s,1H),4.90(s,2H),5.15(s,2H),5.64(s,1H),6.67(s,1H),6.88-6.93(m,3H), 6.99(d,J=8.4Hz,1H),7.06(d,J=1.8Hz,1H),7.20-7.49(m,7H) HR(KBr)3600-3200(br),1609,1599,1519,1477,1459,1381,1253,1216,1156,1111,1077,1066,1012cm <sup>-1</sup>
1.166	m.p.199°C HINMR(CDCL <sub>3</sub> ) δ 3.10(a,3H),3.21(a,3H),3.44(a,3H),3.76(a,3H),5.17(a,2H),6.03(a,1H),6.44(a,1H),7.14(d,J=8.4Hz,1H),7.36-7. 49(m,8H),7.52(d,J=2.1Hz,1H),7.67-7.72(m,2H) IR(KBr)3600-3200(br),1520,1486,1362,1183,1152,1110,971cm <sup>-1</sup>
1-167	m.p.113-115°C HNMR(CDCl3) & 0.76(t,J=7.2Hz,3H),1.46-1.55(m,2H),3.11(s,3H),3.20(s,1H),3.63(s,1H),3.71(t,J=6.6Hz,2H),5.18(s,2H),6.64 (s,1H),7.11(d,J=8.7Hz,1H),7.33-7.50(m,9H),7.60-7.65(m,2H) IR(KBr)1517,1475,1365,1346,1293,1233,1177,1149,1109,1017,956cm <sup>-1</sup>
1.168	m.p.56-58°C HINMR(CDCl <sub>3</sub> ) δ 0.76(t,J=7.5Hz,3H),1.44-1.56(m,2H),3.61(s,3H),3.71(t,J=6.6Hz,2H),3.74(s,3H),4.86(s,1H),5.15(s,2H),5.63 (s,1H),6.65(s,1H),6.88-6.93(m,3H),6.98(d,J=8.4Hz,1H),7.04(d,J=1.8Hz,1H),7.37-7.50(m,7H) IR(KBr)3600-32200(br),1611,1690,1619,1476,1404,1379,1262,1230,1110,1078,1015cm <sup>-1</sup>
1.169	m.p.101·103°C  1HNMR(CDCl <sub>3</sub> ) & 0.77(t,J=7.5Hz,3H),1.44·1.55(m,2H),1.76(9,3H),1.81(9,3H),3.20(9,3H),3.21(9,3H),3.63(9,3H),3.71(t,J=6.6  Hz,2H),3.75(9,3H),4.63(d,J=6.6Hz,2H),5.48·5.53(m,1H),6.64(9,1H),7.04(d,J=8.4Hz,1H),7.32·7.38(m,3H),7.42(d,J=2.1Hz,1H ),7.60·7.65(m,2H)  IR(KB <sub>1</sub> )1514,1473,1370,1359,1290,1233,1174,1149,1107,970cm <sup>-1</sup>

Table 40

	m.p.64-66°C
	HNMR(CDCl3) & 0.77(t,J=7.5Hz,3H), 1.44-1.55(m,2H), 1.76(s,3H), 1.81(s,3H), 3.20(s,3H), 3.21(s,3H), 3.63(s,3H), 3.71(t,J=6.6
1.170	Hz,2II),3.75(8,3H),4.63(d,J=6.6Hz,2H),5.48-5.53(m,1H),6.64(8,1H),7.04(d,J=8.4Hz,1H),7.32-7.38(m,3H),7.42(d,J=2.1Hz,1H
	),7.60-7.65(m,2H)
	11((KBr)3600-2800(br), 1612, 1590, 1520, 1475, 1462, 1405, 1381, 1285, 1244, 1226, 1110, 1079, 988cm 1
	m.p.148-150°C
į	$\text{HINMIK(CDCM} \ \ \delta = 1.74 (\text{d,J} = 0.911z,311), 1.80 (\text{s,311}), 2.88 (\text{s,311}), 3.22 (\text{s,311}), 3.23 (\text{s,611}), 3.56 (\text{s,311}), 3.80 (\text{s,311}), 4.72 (\text{d,J} = 7.5 \text{Hz,2})$
171.1	11),5.55(m,111),6.85(s,111),7.39&7.67(ABq,J=8.711z,411),7.40(s,211)
	IR(KBr)1514,1479,1411,1366,1179,1152,1079,1022,968,875,799,525cm <sup>-1</sup>
	111NMR(CDCki) & 0.94(t, J=7.2Hz, 3H), 1.45(tq, J=7.2,7.2Hz, 2H), 2.13(m, 2H), 3.46(s, 3H), 3.74(s, 3H), 4.68(d, J=5.4Hz, 2H), 5.72(
1.172	m,2H),6.45(s,1H),6.92(d,J=8.7Hz,2H),6.96(brs,2H),7.07(brs,1H),7.53(d,J=8.7Hz,2H)
	'HNMR(CDCl <sub>3</sub> ) & 1.76(brd,J=6.3Hz,3H),3.46(8,3H),3.74(8,3H),4.70(d,J=5.4Hz,2H),5.77(m,2H),6.45(8,1H),6.91(d,J=8.7Hz,2
1.173	H),6.96(brs,2H),7.07(brs,1H),7.53(d,J=8.7Hz,2H)
	IR(Nujol)3350, 1613, 1587, 1523, 1491, 1287, 1261, 1238, 1114, 1071, 1011, 936, 820, 783cm <sup>-1</sup>
7 8	111NMR(CDCl <sub>3</sub> ) & 3.45(8,3H),3.76(8,3H),4.56(8,2H),5.55(8,1H),6.45(8,1H),6.93(d,J=8.7Hz,2H),7.01(d,J=8.4Hz,1H),7.08(dd,J=8.4Hz,1H),7.08(dd,J=8.4Hz,1H),7.08(dd,J=8.4Hz,1H),7.08(dd,J=8.4Hz,1H),7.08(dd,J=8.4Hz,1H),7.08(dd,J=8.4Hz,1H),7.08(dd,J=8.4Hz,1H),7.08(dd,J=8.4Hz,1H),7.08(dd,J=8.4Hz,1H),7.08(dd,J=8.4Hz,1H),7.08(dd,J=8.4Hz,1H),7.08(dd,J=8.4Hz,1H),7.08(dd,J=8.4Hz,1H),7.08(dd,J=8.4Hz,1H),7.08(dd,J=8.4Hz,1H),8.4Hz,1H),8.4Hz,1H,1H,1H,1H,1H,1H,1H,1H,1H,1H,1H,1H,1H,
1-1/4	=8.4,2.1Hz,1H),7.27(d,J=2.1Hz,1H),7.54(d,J=8.7Hz,2H)
	'HNMR(CDCl <sub>1</sub> ) & 3.45(8,3H),3.74(8,3H),4.82(dd,J=6.6,1.5Hz,2H),5.28(d,J=10.5Hz,1H),5.35(d,J=16.5Hz,1H),5.75(dt,J=10.8
101	.6.6Hz,1H),6.26(dd,J=10.5,10.5Hz,1H),6.46(a,1H),6.66(ddd,J=16.5,10.5,10.5Hz,1H),6.92(d,J=8.7Hz,2H),6.96(m,2H),7.07(br
0/1:1	s, 1H), 7.53(d, J=8.7Hz, 2H)
	IR(Nujol)3399,1611,1591,1523,1489,1248,1226,1113,1071,1009,825cm <sup>-1</sup>

Table 41

50	<b>45</b>	40	. 35	30	25	20	15	10	5
176	1HNMR(CDCl3) δ 1.59(m,6H),2.17(m,2H),2.24,(m,2H),2.71(s,3H),3.21(s,3H),3.24(s,3H),3.56(s,3H),3.78(s,3H),4.65(d,J=7.2 11z,2H),5.43(t,J=7.2Hz,1H),6.84(s,1H),7.10(d,J=8.4Hz,1H),7.34(dd,J=8.4,2.1Hz,1H),7.38(d,J=8.7Hz,2H),7.39(d,J=2.1Hz,1 11),7.68(d,J=8.7Hz,2H)	1.59(m,6H),2.17( 2Hz,1H),6.84(s,1	(m,2H),2.24,( H),7.10(d,J=	(m,2H),2.71(s,3 8.4Hz,1H),7.3×	(H),3.21(s,3H)	,3.24(s,3H),3.5 Hz,1H),7.38(d	6(s,3H),3.78(s ,J=8.7Hz,2H)	,3H),4.65(d,J=7,7.39(d,J=2.1Hz	7.2
-177	m.p.177-178°C HINMR(CDCL3) & 2.31(t,J=5.711z,211),2.39(t,J=5.711z,211),2.76(s,3H),3.21(s,3H),3.24(s,3H),3.56(s,3H),3.70(t,J=5.711z,2H),3 -73(t,J=5.711z,2H),3.78(s,3H),4.67(d,J=6.6Hz,2H),5.57(t,J=6.6Hz,1H),6.84(s,1H),7.09(d,J=8.4Hz,1H),7.35(dd,J=8.4,2.1Hz,1 H),7.38(d,J=8.711z,2H),7.39(d,J=2.111z,1H),7.67(d,J=8.711z,2H) HR(KBr)2940,1519,1481,1362,1178,1152,1079,818cm '	C(13) δ 2.31(t,J=5.711z,211),2.39(t,J=5.711z,211),2.76(s,3H),3.21(s,3H),3.24(s,3H),3.56(s,3H),3.70(t,J=5.711z,2H),3 (z,2H),3.78(s,3H),4.67(d,J=6.6Hz,2H),5.71(z,1H),6.84(s,1H),7.09(d,J=8.4Hz,1H),7.35(dd,J=8.4,2.1Hz,1.8.711z,2H),7.39(d,J=2.111z,1H),7.67(d,J=8.711z,2H) (z,2H),7.39(d,J=2.111z,1H),7.67(d,J=8.711z,2H) (z,2H),7.39(d,J=2.111z,1H),7.67(d,J=8.711z,2H)	H),2.39(t,J=5 ,J=6.6Hz,2H Hz,1H),7.67(	.711z,211),2.76( ),5.57(t,J=6.6H d,J=8.711z,211) 8cm '	s,3H),3.21(s,3 [z,1H),6.84(s,1	H),3.24(s,3H), <sup>5</sup> 1H),7.09(d,J=8.	3.56(8,3H),3.7 4Hz,1H),7.35	0(t, J=5.7Hz,2H (dd, J=8.4,2.1Hs	2,1
-178	111NMR(CDCB) 5 1.04(t,J=7.5Hz,3H), 1.05(t,J=7.5Hz,3H), 2.12(q,J=7.5Hz,2H), 2.16(q,J=7.5Hz,2H), 2.71(e,3H), 3.21(e,3H), 3.24(e,3H), 3.56(e,3H), 3.78(e,3H), 4.67(d,J=6.6Hz,2H), 5.45(t,J=6.6Hz,1H), 6.84(e,1H), 7.11(d,J=8.4Hz,1H), 7.35(dd,J=8.4.2.4Hz,1H), 7.38(d,J=8.7Hz,2H), 7.38(d,J=8.7Hz,2Hz,2H), 7.38(d,J=8.7Hz,2Hz,2Hz,2Hz,2Hz,2Hz,2Hz,2Hz,2Hz,2Hz,2	1.04(t,J=7.5Hz,3 ,3.78(s,3H),4.67( ,2H),7.39(d,J=2	H), 1.05(t, J=' (d, J=6.6Hz, 2 4Hz, 1H), 7.6	7.511z,311),2.12 H),5.45(t,J=6.6 8(d,J=8.7Hz,2F	(q,J=7.5Hz,2F Hz,1H),6.84(ε I)	1),2.16(q,J=7.5, 1,1H),7.11(d,J=	Hz,2H),2.71(8	,3H),3.21(8,3H) 35(dd,J=8.4,2.4]	,3.
.179	'HINMR(CI) ),4.66(d,J=6. d,J=2.1Hz,1	(hil) 6 1.05(t,J=7.5Hz,3H),1.76(e,3H),2.10(q,J=7.5Hz,2H),2.71(e,3H),3.21(e,3H),3.24(e,3H),3.56(e,3H),3.78(e,3H 9Hz,2H),5.48(t,J=6.9Hz,1H),6.84(e,1H),7.10(d,J=8.4Hz,1H),7.34(dd,J=8.4,2.1Hz,1H),7.38(d,J=8.7Hz,2H),7.39(H),7.68(d,J=8.7Hz,2H)	H), 1.76(8,3H)	,2.10(q,J=7.5H H),7.10(d,J=8.	z,2H),2.71(6,5 4Hz,1H),7.34	(dd,J=8.4,2.1H	3.24(8,3H),3.5 z,1H),7.38(d,J	6(8,3H),3.78(8,3	H 60
180	<sup>1</sup> HNMR(CDCl <sub>3</sub> ) δ 1.76(s,3H),1.80(s,6H),2.72(s,3H),3.21(s,3H),3.21(s,3H),3.56(e,3H),3.78(s,3H),4.61(s,2H),6.84(s,1H),7.10(d,3-8.4Hz,1H),7.34(dd,3-8.4Hz,1H),7.38(d,3-8.7Hz,2Hz,2H),7.38(d,3-8.7Hz,2Hz,2H),7.38(d,3-8.7Hz,2Hz,2Hz,2Hz,2Hz,2Hz,2Hz,2Hz,2Hz,2Hz,2	(Cl <sub>3</sub> ) δ 1.76(9,3H), 1.80(9,6H), 2.72(9,3H), 3.21(9,3H), 3.21(9,3H), 3.56(9,3H), 3.78(9,3H), 4.61(H), 7.34(dd,J=8.4,2.1Hz,1H), 7.38(d,J=8.7Hz,2H), 7.39(dd,J=8.1,1Hz,1H), 7.68(d,J=8.7Hz,2H)	,6H),2.72(s,3 1H),7.38(d,J	3.21(8,3H), =8.7Hz,2H),7.3	3.21(6,3H),3.5 9(d,J=2.1Hz,1	6(s,3H),3.78(s, H),7.68(d,J=8.	3H),4.61(8,2H 7Hz,2H)	),6.84(8,1H),7.1	ŏ
.181	m.p.157-158°C !HNMR(CDCl <sub>3</sub> ) \$\delta \text{1.65}(m,6H),2.18(m,2H),2.23(m,2H),3.46(s,3H),3.74(s,3H),4.63d,J=7.2Hz,2H),5.47(t,J=7.2Hz,1H),6. 45(s,1H),6.91(d,J=8.4Hz,2H),6.96(br.s,2H),7.06(br.s,1H),7.52(d,J=8.4Hz,2H) IR(KBr)3410,2924,2854,1609,1567,1523,1490,1462,1405,1254,1221,1198,1119,1069,824,813cm <sup>-1</sup>	1.55-1.65(m,6H), .4Hz,2H),6.96(b) .854,1609,1567,1	2.18(m,2H),5 r.s,2H),7.06(1 1623,1490,14	2.23(m,2H),3.46 or.s,1H),7.52(d, 62,1405,1254,1	5(8,3H),3.74(8, J=8.4Hz,2H) 1221,1198,111	3H),4.63d,J=7 9,1069,824,813	2Hz,2H),5.47	(t,J=7.2Hz,1H)	.9

Table 42

	m.p.219-221°C
	111NMR(DMSO.46) & 2.22(t, J=5.411z, 211), 2.32(t, J=5.411z, 211), 3.30(s, 311), 3.56(t, J=5.4Hz, 211), 3.61(t, J=5.4Hz, 211), 3.64(s, 311),
1.182	4.59(d, J=6.611z, 211), 5.54(t, J=6.611z, 111), 6.39(s, 111), 6.64(dd, J=8.4, 2.111z, 111), 6.73(d, J=2.111z, 111), 6.84(d, J=8.711z, 211), 6.89(dd, J=6.611z, 211), 6.84(dd, J=8.711z, 211), 6.89(dd, J=6.611z, 211), 6.84(dd, J=8.711z, 211), 6.89(dd, J=8.711z, 211), 6.89(dd, J=8.4, 2.111z, 111), 6.84(dd,
	,J=8.411z, 111), 7.43(d,J=8.411z,211)
	IR(KBr)3392,2948,1609,1586,1522,1492,1271,1239,1219,1118,1076,1007,818cm-1
	m.p.149.150°C
	**************************************
1.183	64(d, J=6.6Hz, 2H), 5.48(t, J=6.6Hz, 1H), 6.45(s, 1H), 6.92(d, J=8.7Hz, 2H), 6.97(dd, J=7.8, 1.5Hz, 1H), 6.97(d, J=7.8Hz, 1H), 7.06(d, J=6.6Hz, 2H), 7.06(d, J=7.8Hz, 1H), 7.06(
	J=1.5Hz,1H),7.52(d,J=8.7Hz,2H)
:	IR(KBr)3398,2963,2934,1671,1610,1523,1493,1465,1407,1259,1224,1118,1071,813cm <sup>1</sup>
	m.p.217.218%
	HNMR(CDCI;) δ 3.86(8,3H),5.16(8,2H),5.72(6,1H),6.97-7.01(m,3H),7.12(dd,J=2.4,8.4Hz,1H),7.26(d,J=2.4Hz,1H),7.34-7.47
1.104	(m,5H),7.54.7.58(m,2H),7.60(s,4H)
	1R(KBr)3600-3200(br), 1605, 1590, 1493, 1298, 1263, 1263, 1206, 1183, 1022cm <sup>-1</sup>
	111NMR((CH)CH3) 0 1.21(t,J=6.9Hz,3H), 1.77(s,3H), 1.82(s,3H), 2.38·2.46(m,2H), 2.72·2.84(m,2H), 3.18(s,3H), 3.21(s,3H), 3.35(s,
201	3H),3.70(9,3H),4.06(q,J=6.9Hz,2H),4.63(d,J=6.6Hz,2H),5.52(t,J=6.6Hz,1H),6.76(9,1H),7.07(d,J=8.4Hz,1H),7.13(d.d,J=8.4&
001-1	2.1Hz,1H),7.21(d,J=2.1Hz,1H),7.37(d,J=9.0Hz,2H),7.69(d,J=9.0Hz,2H)
	IR(KBr)1727,1517,1469,1364,1291,1234,1179,1152,1118,1080,1003cm <sup>-1</sup>
	111NMR(CI)CL;) 6 1.76(8,3H), 1.82(8,3H), 2.42-2.53(m,2H), 2.72-2.86(m,2H), 3.35(8,3H), 3.69(8,3H), 4.61(d,J=6.6Hz,2H), 5.53(t,
701	J=6.6Hz,1H),5.71(e,1H),6.68(d.d,J=8.4&2.1Hz,1H),6.76(e,1H),6.81(d,J=2.1Hz,1H),6.91(d,J=8.4Hz,2H),6.92(d,J=8.4Hz,1H),1.1H,1.1H,1.2H,1.2H,1.2H,1.2H,1.2H,1.2H
1-100	7.52(d,J=8.4Hz,2H)
	IR(KBr)3419,1707,1612,1518,1472,1390,1225,1078cm <sup>-1</sup>

Table 43

1.187	111NMR(CDCl <sub>3</sub> ) & 2.55(s,3H),3.54(s,3H),3.78(s,3H),5.18(s,1H),6.85(s,1H),6.91(d.d,J=8.4&2.1Hz,1H),7.03(d,J=8.4Hz,1H),7.03(d,J=2.1Hz,1H),7.33·7.48(m,5H),7.71(d,J=8.4Hz,2H),7.72(d,J=8.4Hz,2H) 11R(KBr)3442,1617,1517,1485,1485,1394,1357,1331,1171,1124,1077,1067,1016cm <sup>-1</sup>
1.188	<sup>1</sup> HINMR(CDCL <sub>3</sub> .) & 2.68(s,3H),3.13(s,3H),3.54(s,3H),3.79(s,3H),5.19(s,2H),6.86(s,1H),7.16(d,J=8.7Hz,1H),7.31.7.50(m,7H),7.7.72(d,J=8.7Hz,2H),7.76(d,J=8.7Hz,2H),7.31.7.50(m,7H),7.112(d,J=8.7Hz,1H),7.1120,1079,1065,1016cm <sup>-1</sup>
1.189	"HINMIR(CDCLs) & 2.68(s,3H),3.13(s,3H),3.54(s,3H),3.79(s,3H),5.19(s,2H),6.86(s,1H),7.16(d,J=8.7Hz,1H),7.31.7.50(m,7H),7.7.72(d,J=8.7Hz,2H),7.76(d,J=8.7Hz,2H),7.31.7.50(m,7H),7.7.112(d,J=8.7Hz,2H),7.16(d,J=8.7Hz,1H),7.31.7.50(m,7H),7.7.1120,1079,1065,1016cm <sup>-1</sup>
I-190	<sup>1</sup> HNMR(CDCh <sub>3</sub> ) & 1.76(s,3H), 1.82(s,3H), 3.46(s,3H), 3.76(s,3H), 4.62(d,J=8.4Hz,2H), 5.53(t,J=8.4Hz,1H), 5.71(s,1H), 5.85(s,1H), 6.94(d,d,J=8.1&1.8Hz,1H), 6.98(d,J=8.1Hz,1H), 7.05(d,J=1.8Hz,1H), 7.71(d,J=8.1Hz,2H), 7.77(d,J=8.1Hz,2H), 1.87(kBr)3552,3505,3466,1613,1509,1487,1397,1324,1288,1245,1110,1065cm <sup>-1</sup>
1-191	<sup>1</sup> HINMR(CDCh3) δ 3.02(s,6H),3.48(s,3H),3.76(s,3H),5.15(s,2H),5.67(s,1H),5.95(s,1H),6.47(s,1H),6.81(d,J=8.7Hz,2H),6.96(d.d,J=8.4Hz,1H),7.10(d,J=2.1Hz,1H),7.31-7.49(m,5H),7.56(d,J=8.7Hz,2H) IR(KBr)3543,3500,1605,1526,1486,1459,1245,1198,1110,1070,999cm <sup>-1</sup>
1-192	mp122-124°C HINMR(CDCh) & 2.70(brs,3H),3.56-3.60(br,2H),3.60(s,3H),3.75(s,3H),3.81-3.83(m,2H),3.87(s,3H),5.15(s,2H),5.68(s,1H),6. 69(s,1H),6.94(dd,J=2.1,8.4Hz,1H),6.97-7.03(m,3H),7.07(d,J=1.8Hz,1H),7.38-7.48(m,5H),7.51-7.56(m,2H) IR(KBr)3600-2800(br),1607,1597,1550,1518,1477,1462,1452,1392,1289,1248,1228,1175,1122,1096,1084,1015cm <sup>-1</sup>

· Table 44

5

	m.p.160-163°C
3	41NMR(CDCL), § 3.60(a,3H),3.60-3.64(br,2H),3.76(a,3H),3.77-3.80(m,2H),5.15(a,2H),5.69(a,1H),5.88(a,1H),6.69(a,1H),6.90-
<u> </u>	6.94(m,311),7.02(d,J=8.411z,1H),7.08(d,J=2.1Hz,1H),7.38·7.51(m,7H)
	1R(KBr)3600-3200(br), 1613, 1588, 1519, 1477, 1462, 1397, 1256, 1189, 1117, 1078, 10) 1cm-1
	111NMR(CDCh) & 3.02(s,6H),3.11(s,3H),3.50(s,3H),3.72(s,3H),4.43(brs,1H),4.58(brs,1H),5.18(s,2H),6.82(d,J=8.7Hz,2H),6.9
1.194	2(s, 111),7.16(d,J=9.3Hz, 111),7.31-7.51(m,711),7.55(d,J=8.7Hz,211)
	IR(KBr)3432, 1611, 1526, 1476, 1356, 1291, 1232, 1186, 1117, 1079, 1012cm
	m.p.157-158°C
	1HNMR(CI)Cl <sub>3</sub> ) δ 3.10(8,3H),3.21(8,3H),3.56(8,3H),3.69(8,3H),3.76(8,3H),4.47(8,2H),5.17(8,2H),6.68(8,1H),7.12(d,J=8.2Hz,
1-195	1H),7.34.7.50(m,9H),7.63(d,J=8.6Hz,2H)
	IR(KBr):1748,1517,1476,1366,1232,1150,1114,968,873,812,791,750,707cm-1
	m.p.189.191°C(dec)
5	"HNMR(DMSO-ds) & 3.45(s,3H),3.67(s,3H),4.25(s,2H),5.12(s,2H),6.66(dd,J=8.4,2.0Hz,1H),6.69(s,1H),6.77(d,J=2.0Hz,1H),6
1-130	.80(d,J=8.6Hz,2H),6.98(d,J=8.4Hz,1H),7.33·7.54(m,7H),9.01(s,1H),9.54(brs,1H)
	IR(KBr):3422,3245,1733,1611,1596,1522,1478,1400,1262,1248,1222,1207,1130,1084,1011,836,781,744,699cm <sup>-1</sup>
	m.p.161.162°C
	<sup>1</sup> HNMR(CDCl <sub>3</sub> ) δ 1.76(8,3H), 1.81(8,3H), 3.20(8,3H), 3.21(8,3H), 3.56(8,3H), 3.70(8,3H), 3.75(8,3H), 4.47(8,2H), 4.63(4,J=6.9Hz,
1.197	2H),5.51(t,J=6.9Hz,1H),6.68(s,1H),7.05(d,J=8.4Hz,1H),7.36(dd,J=8.4,2.1Hz,1H),7.36(d,J=8.9Hz,2H),7.41(d,J=2.1Hz,1H),7.
	63(d,J=8.9Hz,2H)
	IR(KBr):1751,1517,1475,1366,1234,1150,1113,968,872,812,707cm <sup>-1</sup>

Table 45

m.p.155-156\(\text{T}\)  m.p.156-110\(\text{T}\)  m.p.155-156\(\text{T}\)  m.p.156-120\(\text{T}\)  m.p.156-120\(\text{T}	50	45	40	35	30	25	20	15	10	5
m.p.155-11 11NMR(I) d,J=8.4,1.5 ,55(s,1H),1 IR(KBr)16 11),7.36-7.6 IIR(KBr)16 1H),7.22-7 ) IR(Nujol)1 1HNMR(CI 1H),7.17(b) Hz,2H) IR(Nujol)1 1HNMR(CI 1H),7.17(b) 11R(Sujol)1 1HNMR(CI 1H),7.17(b) 11R(Sujol)1 1HNMR(CI 1H),7.17(b) 11R(Nujol)1 1HNMR(CI 1H),7.17(b) 1HR(Nujol)1 1HR(HVIJOL)1 1HNMR(CI 1HR(Nujol)1H					₽					
HINMR(D   d,J=8.4,11.5   ,55(s,1H),1   HIK(KBr):3   HIK(KBr):16   HN,7.36-7.7   HN,7.22-7   HN,7.22-7   HN,7.22-7   HN,7.22-7   HN,7.22-7   HN,7.22-7   HN,7.22-7   HN,7.22-7   HN,7.17(b)   HR,2H)   HR,2H    H		m.p.155-156°C		-						
d,J=8.4,1.5, 55(s,1H),1 IR(KBr):3-1HNMR(C II),7.36-7.6 IIR(KBr)16 IH),7.22-7 )  IHNMR(CI III),7.17(b) IIR(Nujol)11 IIR(HCII3)11 IIR(HUJOL)11 IIR(HUJ		HINMIR(DMSO-6	de) δ 1.72(s,3F	I), I.76(s,3H),3.	42(s, 3H), 3.67	(s,3H),4.25(s,2	?H),4.54(d,J=(	3.8Hz,2H),5.49	)(t,J=6.8Hz,1H	p)99.9'(
1R(KBr).34 1R(KBr).34 1R(KBr).36 1R(KBr).16 1R(KBr).16 1H),7.22-7 1H),7.22-7 1H),7.22-7 1H),7.22-7 1H),7.22-7 1H),7.22-7 1H(Kujol).16	98	d,J=8.4,1.9Hz,1H	1),6.69(a, 111),6	73(d,J=1.9Hz,	.1H),6.84(d,J=	<b>-8.411z,2H),7.</b> 3	6(d,J=8.4Hz,	1H),7.41(d,J=8	3.4Hz,2H),8.85(	(a,1H),9
IR(KBr):34  'IINMR(C!)  II),7.:36-7.5  IR(KBr) 166  'HNMR(C!)		,55(s,1H),11.2-13	1.6(brs, 111)							
111,7.36-7.6 11,7.36-7.6 111,7.36-7.6 111,7.22-7. ) 111,7.22-7. 111,7.17(hr 111,7.17(hr 112,21) 111,7.17(hr 112,21) 111,7.17(hr 113,21) 111,7.17(hr 111,7.31(hr 11		1R(KBr):3411,32	43,1733,1611,	1594, 1522, 147	7,1398,1247,1	207,1126,108:	3,1015,835,78	8cm <sup>-</sup> 1		
		HINMR(CDCl3) &	5 2.68(s,3H),3	3.13(s,311),3.65	(s,3H),3.80(s,	3H), 5. 19(8, 2H	,6.88(s, 1H),7.	.16(d,J=8.7Hz	,1H),7.34(d,J=	2.1Hz,1
	99	11),7.36-7.50(m,6l	11),7.81(d,J=8.	4Hz,2H),7.98(c	1,3=8.4112,211	•				
		1R(KBr) 1698, 160	12,1481,1351,1	232,1182,1079	cm <sup>-1</sup>					
		HNMR(CDCl3) δ	3 2.42(s,3H),2	.71(s,3H),3.03(	(s,311),3.21(s,	3H),3.56(s,3H)	,3.79(s,3H),5.	17(s,2H),6.84(	e,1H),7.19(d,J=	-8.4Hz,
	٤	1H),7.22-7.30(m,	3H),7.37(dd,J=	-8.4,2.1Hz,1H)	,7.38(d,J=8.7)	Hz,2II),7.41(d,	J=2.1Hz,1H),	7.41-7.45(m,1	H),7.68(d,J=8.7	/Hz,2H
	3	_								
		IR(Nujol)1607,15	19,1480,1177,	1151,1079,970	,875,798cm <sup>-</sup>	-				
		HNMR(CDCla) &	2.38(s,3H),2	.67(s,3H),3.14(	(s,3H),3.21(s,3	3H),3.56(8,3H)	,3.78(s,3H),5.	15(a,2H),6.84(	e,1H),7.14(d,J=	:8.4Hz,
<del> </del>	=	111),7.17(brd,J=7.	.611z,111),7.23	-7.30(m,3H),7.	34(dd,J=8.4,1	.811z,1H),7.38	(d,J=8.7Hz,2	H),7.41(d,J=1.	8Hz, 111), 7.68(c	1,3=8.7
	5	Hz,2H)								
		IR(Nujol)1606,15	19,1482,1180,	1150,1078,101	1,979,876,790	)cm <sup>-1</sup>				
brs,2H),7.37(d,J=8 IR(CHCl <sub>3</sub> )1610,15 'HNMR(CDCl <sub>3</sub> ) δ 6(brs,2H),7.14(d,J= IR(Nujol)1607,151		'HNMR(CDCla) &	2.30(s,3H),2	.38(s,6H),2.74(	8,3H),2.94(8,3	H),3.21(6,3H)	,3.57(e,3H),3.	79(s,3H),5.13(	a,2H),6.85(a,1H	),6.91(
1R(CHCl <sub>3</sub> )1610,15 1HNMR(CDCl <sub>3</sub> ) δ 6(brs,2H),7.14(d,J- 1R(Nujol)1607,1519	02	brs,2H),7.37(d,J=	8.7Hz,2H),7.4	0(brs,2H),7.41(	(dd,J=8.4,1.8}	., 1H), 7.69(d,	J=8.7Hz,2H)			
1HNMR(CDCl <sub>3</sub> ) & 6(brs,2H),7.14(d,J=1R(Nujol)1607,151		1R(CHCl3)1610,18	518,1477,1370	,1177,1149,108	82,970,873cm	- 1	·			
		1HNMR(CDCl3) 8		.66(s,3H),3.15(	e,3H),3.21(s,3	(H), 3.56(s, 3H),	3.78(s,3H),5.1	12(s,2H),6.84(ı	з,1Н),6.99(bгв,	IH),7.0
IR(Nujol)1607.1519.1480.1178,1152,1097,1014,969,876,824,797cm <sup>-1</sup>	03	6(brs,2H),7.14(d,J	J=8.4Hz,1H),7	.33(dd,J=8.4,2.	1Hz,1H),7.38	(d,J=8.7Hz,2E	[),7.40(d,J=2.]	1Hz, 1H), 7.68(	1,J=8.7Hz,2H)	
		IR(Nujol) 1607, 15	19,1480,1178	1152,1097,101	4.969.876.824	,797cm <sup>-1</sup>				

Table 46

	HINMR(CDCl3) δ 2.72(8,3H),3.16(8,3H),3.21(8,3H),3.55(8,3H),3.78(8,3H),3.94(8,3H),5.25(8,2H),6.84(8,1H),7.11(d,J=8.4Hz,
700	111),7.34(dd,J=8.4,2.111z,111),7.38(d,J=8.711z,211),7.42(d,J=2.111z,111),7.55(d,J=8.411z,2H),7.68(d,J=8.7Hz,2H),8.09(d,J=8.4
1.07-1	Hz,2H)
	IR(Nujol)1719,1610,1519,1480,1177,1151,1119,1080,1016,969,875,798cm <sup>1</sup>
	m.p.153-157°C '
	$IIINMR(CDC33) \delta - 2.70(s, 311), 3.16(s, 311), 3.21(s, 311), 3.56(s, 311), 3.78(s, 311), 5.13(s, 211), 6.41(dd, J=3.3, 2.0Hz, 1H), 6.49(d, J=3.2, 2.0Hz, 1H$
1.205	11z, 111), 6.84(s, 111), 7.20(d, J=8.711z, 111), 7.37(dd, J=8.7,2.111z, 111), 7.38(d, J=8.7Hz, 2H), 7.41(d, J=2.1Hz, 1H), 7.46(d, J=2.0Hz, 1
	H),7.68(d,J=8.7Hz,2H)
	IR(Nujol)1605,1518,1482,1375,1361,1180,1150,1079,1013,977,876,814,800cm <sup>1</sup>
	111NMR(CDCl3) & 2.41(8,311),3.46(8,3H),3.75(8,3H),5.13(8,2H),6.45(8,1H),6.92(d,J=8.7Hz,2H),6.99(dd,J=8.4,2.111z,1H),7.07
1.206	1.206 (d,J=8.4Hz,1H),7.09(d,J=2.1Hz,1H),7.22.7.34(m,3H),7.40(brd,J=7.8Hz,1H),7.53(d,J=8.7Hz,2H)
	IR(Nujol)3471,3436,3339,1612,1581,1523,1489,1266,1245,1228,1185,1110,1070,1011,998,945,823,781cm <sup>-1</sup>
	$HINMR(CDCl_3) \ \delta \ 2.40(a,311), 3.45(a,311), 3.75(a,311), 5.11(a,211), 6.45(a,111), 6.91(d,J=8.711z,211), 6.95(dd,J=8.4,1.811z,111), 7.01$
1.207	1.207 (d,J=8.411z,111),7.09(d,J=1.811z,111),7.19(brd,J=7.511z,111),7.22·7.34(m,3H),7.53(d,J=8.7Hz,211)
	IR(Nujol)3410,1611,1589,1523,1489,1246,1225,1114,1071,1011,939,824,814,778cm <sup>-1</sup>
	m.p.230.236°C
	$HINMR(I)MSO\cdot d_4) \ \delta \ 2.25(a,311), 2.35(a,611), 3.31(a,311), 3.65(a,311), 5.00(a,211), 6.39(a,111), 6.69(dd,J=8.4,1.811z,111), 6.76(d,J=1)$
902-1	.811z, 111),6.84(d,J=8.7Hz, 111),6.90(brs,2H),7.06(d,J=8.4Hz,3H),7.44(d,J=8.7Hz,2H)
	IR(Nujol)3475,3361,1609,1579,1621,1260,1244,1110,1071,1012,988,822,782cm <sup>-1</sup> ,
	$^{\rm i} {\rm HNMR}({\rm CDC}_{13}) \ \delta \ 2.35(8,6H), 3.45(8,3H), 3.75(8,3H), 5.07(8,2H), 6.45(8,1H), 6.91(d,J=8.7Hz,2H), 6.95(dd,J=8.4,1.8Hz,1H), 7.01(1.2H), 1.2Hz, 1$
1.209	(hrs, 1H), 7.02(d, J=8.4Hz, 1H), 7.06(brs, 2H), 7.08(d, J=1.8Hz, 1H), 7.63(d, J=8.7Hz, 2H)
	IR(Nujol)3410,1610,1588,1523,1489,1248,1225,1114,1071,1011,940,825,808,cm <sup>-1</sup>

Table 47

5 10 15 20 25	11NMR(CD,(OD) 6 3.37(8,311),3.67(8,3H),5.25(8,2H),6.43(8,1H),6.77(dd,J=8.4,2.1Hz,1H),6.84(d,J=8.7Hz,2H),6.89(d,J=2.1H 1-210 z,1H),6.94(d,J=8.4Hz,1H),7.45(d,J=8.7Hz,2H),7.60(d,J=8.4Hz,2H),8.04(d,J=8.4Hz,2H) 1R(Nujol)3:384,1694,1612,1591,1523,1488,1249,1113,1071,1013,940,826,812,765cm <sup>-1</sup>	'IINMR(CDCl.)	m.p. 156-158°C. HINMR(CDCL:) δ 1.06(t,J=7.4Hz,3H),1.75(s,3H),2.10(q,J=7.4Hz,2H),3.46(s,3H),3.75(s,3H),4.64(d,J=7.0Hz,2H),5.52(t,J=7.0Hz,1H),6.45(s,1H),6.92(d,J=8.6Hz,2H),6.96(br.s,2H),7.06(br.s,1H),7.53(d,J=8.6Hz,2H) IR(KBr)3392,2960,2934,1610,1583,1568,1523,1492,1465,1406,1259,1241,1224,1198,1118,1071,824,812cm <sup>-1</sup>	m.p.175-177°C !HNMR(CDCl <sub>3</sub> ) & 1.77(s,3H), 1.80(s,6H), 3.46(s,3H), 3.75(s,3H), 4.59(s,2H), 6.45(s,1H), 6.92(d,J=8.7Hz,2H), 6.96(br.s,2H), 7.06( br.s,1H), 7.53(d,J=8.7Hz,2H) IR(KBr)3449,2929,1612,1581,1523,1489,1403,1262,1243,1228,1113,1070,823,807cm <sup>-1</sup>	<sup>1</sup> HNMR(CDCl <sub>3</sub> ) δ 1.6G(tt,J=6.6,6.6Hz,2H),1.74(tt,J=6.6,6.6Hz,2H),2.32(t,J=6.6Hz,2H),2.34(t,J=6.6Hz,2H),2.71(s,3H),3.21( s,3H),3.24(s,3H),3.56(s,3H),3.78(s,3H),4.62(d,J=6.9Hz,2H),5.60(m,1H),6.84(s,1H),7.09(d,J=8.7Hz,1H),7.34(dd,J=8.7,2.1Hz, 1H),7.37(d,J=8.7Hz,2H),7.38(d,J=2.1Hz,1H),7.67(d,J=8.7Hz,2H) IR(KBr)2941,1610,1518,1418,1365,1177,1151,1079,847,818cm <sup>-1</sup>	'HNMR(CDCl <sub>3</sub> ) & 1.57-1.72(m,4H),2.05-2.13(m,4H),2.70(s,3H),3.21(s,3H),3.23(s,3H),3.56(s,3H),3.78(s,3H),4.48(s,2H),5.86(s,1H),6.84(s,1H),7.09(d,J=8.4Hz,1H),7.34(dd,J=8.4,2.1Hz,1H),7.38(d,J=8.7Hz,2H),7.38(d,J=2.1Hz,1H),7.67(d,J=8.7Hz,2H)  1R(KBr)2936.1610.1518.1481.1365.1177.1151.1079.818cm <sup>-1</sup>
35	7(s,311),3.67(s,3H),5.2 H),7.45(d,J=8.7Hz,2H 12,1591,1523,1488,12	s,3H),3.74(s,3H),5.09 [z,1H),7.07(d,J=2.1H: 39,1523,1489,1248,12	(t,J=7.4Hz,3H),1.75(s 2(d,J=8.6Hz,2H),6.96 1,1610,1583,1568,152	s,3H),1.80(s,6H),3.46 ,2H) ,1581,1623,1489,140	tt,J=6.6,6.6Hz,2H), 1. 3H),3.78(8,3H),4.62(d ,7.38(d,J=2.1Hz,1H), ,1418,1365,1177,115	1.72(m,4H),2.05-2.13( J=8.4Hz,1H),7.34(dd, 1.481,1365,1177,115
45	HNMR(CD <sub>2</sub> OD) 6 3.3 HD,6.94(d,J=8.4Hz,1 R(Nujol)3384,1694,16		m.p. 156-158'C HINMR(CDCl <sub>3</sub> ) δ 1.06 0Hz, 1H),6.45(s,1H),6.95 IR(KBr)3392,2960,293	m.p.175-177°C !HNMR(CDCl <sub>3</sub> ) & 1.77(s,3H) br.s,1H),7.53(d,J=8.7Hz,2H) IR(KBr)3449,2929,1612,158	<sup>1</sup> HNMR(CDCl <sub>3</sub> ) & 1.66(tt,J=6.6,6.6Hz,2H),1.74(tt,J=6.6,6.6Hz,2) 8,3H),3.24(8,3H),3.56(8,3H),3.78(6,3H),4.62(d,J=6.9Hz,2H),5.60(i 1H),7.37(d,J=8.7Hz,2H),7.38(d,J=2.1Hz,1H),7.67(d,J=8.7Hz,2H) 1R(KBr)2941,1610,1518,1418,136,1177,1151,1079,847,818cm	'HNMR(CDCl <sub>3</sub> ) & 1.57-1.72(m,4H),2.05-2.13(m,4H),2.70(s,3Fs,1H),6.84(s,1H),7.09(d,J=8.4Hz,1H),7.34(dd,J=8.4,2.1Hz,1H),1.34(dd,J=8.4,2.1Hz,1H),1.3936,1610,1518,1481,1365,1177,1151,1079,818cm <sup>-1</sup>
50	1.210 z	2, 112.1	11 1-212 0 0 11 11 11	I.213 b	1. 8, 1.214 11	1. 1.215 s, 116

## · Table 48

11NMR(CDCl <sub>3</sub> )	.IIINMR(CDCh) & 1.74(d,J=6.6Hz,3H),2.54(d,J=2.1Hz,1H),2.70(8,3H),3.21(8,3H),3.24(8,5H),5.20(8,5H),5.70(8,3H),5.70(8,3H),5.71(8,3H),5.71(8,5H),5
8	111), 6.84(8, 111), 7.28(d, $J=8.711z$ , $J11$ ), 7.36(dd, $J=8.7,2.111z$ , $J11$ ), 7.38(d, $J=8.7Hz$ , $Z11$ ), 7.41(d, $J=2.1Hz$ , $J11$ ), 7.58(d, $J=8.7Hz$ , $Z11$ ), 7.41(d, $Z=2.1Hz$ , $Z=2.$
	IR(KBr):3282,3023,2940,1609,1519,1481,1365,1177,1151,1079,970,816cm <sup>1</sup>
	111111111111111111111111111111111111
	11),6.95(br.s,211),7.06(br.s,111),7.68(d,J=8.611z,211)
	IR(KBr)3282,3023,2940,1609,1519,1481,1365,1177,1151,1079,970,815cm <sup>-1</sup>
_	
<b>4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1</b>	111111111111111111111111111111111111
	411z, 111),7.08(d,J=2,111z,1H),7.34-7.65(m,711),7.83-7.92(m,2H)
	IR(CHCl <sub>3</sub> )3530,3022,1614,1588,1500,1485,1463,1405,1326,1290,1249,1168,1130,1117,1073,1011cm
<u> </u>	111111111111111111111111111111111111
	.85(8,111),7.08(d,J=8.7Hz,1H),7.35(dd,J=2.1,8.7Hz,1H),7.39(d,J=2.1Hz,1H),7.55-7.69(m,2H),7.81·7.87(m,2H)
<u> </u>	IR(CHCl <sub>3</sub> )3024,1609,1519,1481,1467,1396,1369,1321,1272,1179,1122,1082,1015cm <sup>-1</sup>
	(111111111111111111111111111111111111
0.0.01(111,6)50.01	(3.84(s,1H),6.46(s,1H),6.93-7.05(m,3H),7.55-7.65(m,2H),7.82-7.91(m,2H).
IR(KBr)3406,293	IR(KBr)3406,2935,1587,1519,1501,1488,1459,1359,1323,1304,1291,1274,1223,1170,1126,1113,1075,1018cm

Table 49

55

50	45	40	35	30	25	20	15	10	5
1.22.1	m.p.187-189°C 1   INMR(C(1)C(1)	)C (Cl <sub>3</sub> ) \$\( 2.33(8,31!), 2.69(8,31!), 3.21(8,31!), 3.24(8,31!), 3.55(8,31!), 3.77(8,31!), 4.17(8,21!), 6.84(8,11!), 7.12&7.25(ABq,), 7.31(dd,J=8.11!z,J=1.51!z,11!), 7.38&7.67(ABq,J=8.7Hz,41!), 7.42(d,J=8.11Hz,11!), 7.46(d,J=1.5Hz,11!), 7.46(d,J=1.	.1.5Hz,1H),7.34 1.5Hz,1H),7.34 36,1343,1177,1	,311),3.24(s,31 8&7.67(ABq,J	1),3.55(s,311),; =8.7Hz,411),7 4,1013,976,90	3.77(s,3H),4.17 .42(d,J=8.1Hz, 11,939,867,854	(8,2H),6.84(8, 1H),7.46(d,J=	,1H),7.12&7.2l =1.5Hz,1H) 799,523cm <sup>-1</sup>	(ABq,
1.222	m.p.107-112°C IIINMR(CDCh)	?U. (Jl.) \$\tilde{C} 2.73(8,3H),3.22(8,3H),3.28(8,3H),3.55(8,3H),3.77(8,3H),4.34(8,2H),6.84(8,1H),7.19(m,1H),7.30(dd,J=8.1H),7.34-7.41(m,3H),7.46(d,J=1.8Hz,1H),7.49(d,J=8.1Hz,1H),7.62-7.69(m,3H),8.55(m,1H) 4,1389,1364,1179,1151,1081,937,873,813,797,523cm^{-1}	2(s,3H),3.28(s, .46(d,J=1.8Hz, i1,1081,937,87	311),3.55(s,31  ,111),7.49(d,J=	1),3.77(s,3H),4 -8.1Hz,1H),7.6	1.34(e,211),6.84 52-7.69(m,3H),	(e, 111), 7.19(m 8.55(m, 1H)	,1H),7.30(dd,J	=8.1H
1-223	m.p.212-214°C <sup>1</sup> HNMR(CIDCl <sub>3</sub> +CD <sub>3</sub> OD) δ 3.45(s,3H),3.74(s,3H),4.13(s,2H),6.45(s,1H),6.90-6.96(m,3H),7.12(d,J=1.8Hz,1H),7.18-7.26(m,2 <sup>1</sup> H),7.48-7.54(m,3H),7.68(m,1H),8.63(m,1H) <sup>1</sup> IR(KB <sub>7</sub> )3504,3272,1612,1596,1574,1521,1492,1463,1436,1406,1362,1310,1265,1222,1172,1116,1083,1052,1017,828cm <sup>-1</sup>	:D <sub>3</sub> OD)	8,3H),3.74(s,3] .63(m,1H) ?4,1521,1492,1	H),4.13(s,2H),4.13(s,140)	6.45(s,1H),6.9 5,1362,1310,1	10-6.96(m,3H), 265,1222,1172	7.12(d,J=1.8F	iz,1H),7.18-7.2 052,1017,828c	.6(m,2 m <sup>-1</sup>
1.224	m.p.199-200°C HINMR(CDCL3) & 1.46(d,J=0.9Hz,3H),1.77(s,3H),3.44(s,3H),3.74(s,3H),3.90(m,2H),5.25(m,1H),6.04(brs,1H),6.45(s,1H),6.9 3&7.53(ABq,J=8.7Hz,4H),7.00(m,2H),7.05(m,1H) IR(KBr)3404,2999,2932,1612,1595,1522,1483,1454,1432,1401,1376,1357,1271,1223,1119,1080,1055,1015,974,938,829,81 7cm <sup>1</sup>	°C Cla) & 1.46(d,J=0.9Hz,3H),1.77(s,3H) ,J=8.7Hz,4H),7.00(m,2H),7.05(m,1H) 1,2999,2932,1612,1595,1522,1483,14	z,311),1.77(s,3  ,2H),7.05(m,11) 95,1522,1483,1	H),3.44(s,3H), H) 1454,1432,140	3.74(6,3H),3.£	00(m,2H),6.25(	m, 1H),6.04(br	re,1H),6.45(e,1	H),6.9
1-225	m.p.181-183°C 1HNMR(CDCl <sub>3</sub> ) δ 1.37(s,9H),3.45(s,3H),3.75(s,3H),4.93(brs,1H),6.00(s,1H),6.46(s,1H),6.93&7.54(ABq,J=8.7Hz,4H),6.99(s, 1H),7.01(dd,J=8.4Hz,J=1.5Hz,1H),7.16(d,J=1.5Hz,1H),7.49(d,J=8.4Hz,1H) 1R(KBr)3495,3412,2959,2931,1610,1568,1552,1521,1499,1477,1459,1400,1364,1319,1270,1227,1192,1161,1116,1102,1090,1052,1019,942,833,817,588cm <sup>-1</sup>	Cl <sub>3</sub> ) & 1.37(s,9H),3.46 J=8.4Hz,J=1.5Hz,1H 5,3412,2959,2931,161 42,833,817,588cm <sup>-1</sup>	5(a,3H),3.75(a, ),7.16(d,J=1.5) 10,1568,1552,1	3H),4.93(brs, ] Hz,1H),7.49(d [521,1499,147	1H),6.00(8,1H ,J=8.4Hz,1H) 7,1459,1400,1	),6.46(a,1H),6.9	03&7.54(ABq.	J=8.7Hz,4H),(	3.99(s,

Table 50

1-226	m.p.154-156°C HINMR(CDCl <sub>3</sub> ) & 2.33(s,3H),3.45(s,3H),3.75(s,3H),3.90(s,2H),4.68(s,1H),5.97(s,1H),6.45(s,1H),6.60(s,1H),6.90-6.98(m,3H), 7.10(s,5H),7.41(d,J=8.1Hz,1H),7.53(m,2H) HR(Rb)3462,3368,1611,1550,1621,1499,1472,1455,1437,1401,1362,1321,1293,1267,1229,1187,1174,1164,1118,1077,1050 1011,821cm
1-227	m.p.172-174°C HINMR(CDCL3) & L.3R(d,J=1.211z,311),1.76(a,311),3.74(a,311),3.87(d,J=7.811z,211),5.08(brs,111),5.26(m,111),6.08(s ,111),6.45(s,111),6.94&7.53(ABq,J=8.711z,411),7.11-7.14(m,211),7.62(d,J=8.711z,111),8.87(s,111) IR(KBr)3412,1613,1520,1478,1458,1443,1404,1360,1346,1290,1270,1224,1200,1171,1119,1078,1054,945cm <sup>-1</sup>
1-228	m.p.173-176°C <sup>1</sup> HNMR(CDCl <sub>3</sub> ) δ 1.69(e,3H),1.74(s,3H),2.10(s,3H),2.50-2.61(m,2H),3.20(e,3H),3.21(e,3H),3.37(e,3H),3.71(s,3H),4.08(t,J=6. <sup>1</sup> 8Hz,2H),5.21-5.25(m,1H),6.73(s,1H),7.03-7.18(m,2H),7.23-7.25(m,2H),7.37(d,J=8.6Hz,2H),7.69(d,J=8.8Hz,2H) <sup>1</sup> 18(KBr)3600-3200(br),3100-2800(br),1610,1527,1523,1477,1432,1365,1240,1172,1160,955,923cm <sup>-1</sup>
1.229	m.p.148·150°C <sup>1</sup> HNMR(CDCl <sub>3</sub> ) δ 1.70(s,3H),1.77(s,3H),2.09(s,3H),2.48·2.62(m,2H),3.38(s,3H),3.73(s,3H),4.09(t,J=7.0Hz,2H),4.84(br,1H), <sup>1</sup> 5.19·5.22(m,1H),5.70(s,1H),6.71·6.96(m,6H),7.55(d,J=8.2Hz,2H) <sup>1</sup> 1R(KBr)3700·3200(br),3100·2800(br),1612,1684,1560,1448,1428,1390,1339,1316,1284,1246,1173,1160,1123,1018,999cm
1.230	m.p.194·196°C 'HNMR(CDCl <sub>3</sub> )

Table 51

. 55

5	.86-7. 07cm	.30-7.	[z, 1H	19(t, J , J=8.	Hz,1	J=2.1
. 10	m.p.178-180°C. HINMR(CDCI <sub>3</sub> ) & 2.09(s,3H),2.40(s,3H),3.37(s,3H),3.72(s,3H),4.97(brs,1H),5.10(s,2H),5.67(br,1H),6.70-6.75(m,2H),6.86-7. 03(m,3H),7.22-7.26(m,2H),7.32-7.34(m,2H),7.54(d,J=8.2Hz,2H) IR(KBr)3600-3200(br),3100-2800(br),1611,1519,1479,1463,1388,1339,1314,1286,1258,1246,1225,1128,1098,1077,1007cm	m.p.177-179℃ 1HNMR(CDCB <sub>3</sub> ) & 2.64(H,3H),2.69(H,3H),3.13(H,3H),3.54(H,3H),3.77(H,3H),5.19(H,2H),6.85(H,1H),7.15(H,J=B.4Hz,2H),7.30-7. 49(m,9H),7.53-7.59(m,2H) IR(CHCl <sub>3</sub> )1516,1476,1368,1266,1176,1118,1077,1080,1013,970,876,820cm <sup>-1</sup>	amorphouspowder !HNMR(CDCl <sub>3</sub> )	·HNMR(CDCl <sub>3</sub> ) & 1.76(s,3H), 1.81(s,3H), 2.73(s,3H), 3.24(s,3H), 3.53(s,3H), 3.79(s,3H), 3.96(s,3H), 4.64(d,J=6.9Hz,2H), 5.49(t,J=6.9Hz,1H), 6.87(s,1H), 7.09(d,J=8.4Hz,1H), 7.35(d,d,J=8.4Hz,1H), 7.35(d,J=2.1Hz,1H), 7.71(d,J=8.4Hz,2H), 8.13(d,J=8.4Hz,2H) 4Hz,2H)	<sup>1</sup> HNMR(CDCl <sub>3</sub> ) δ 2.69(8,3H),3.14(8,3H),3.55(8,3H),3.80(8,3H),5.20(8,2H),6.89(8,1H),7.16(d,J=9.0Hz,1H),7.34(d,J=2.1Hz,1 H),7.36-7.51(m,6H),7.75(d,J=8.4Hz,2H),8.23(d,J=8.4Hz,2H) IR(KBr)3427,1724,1685,1606,1609,1481,1369,1272,1235,1179,1120,1084,1017cm <sup>-1</sup>	1HNMR(CDCl <sub>3</sub> ) δ 3.46(8,3H),3.77(8,3H),5.16(8,3H),6.50(8,3H),6.96(dd,J=84&2.1Hz,1H),7.03(d,J=8.4Hz,1H),7.09(d,J=2.1 Hz.1H),7.34-7.50(m.5H),7.75(d,J=8.1Hz,2H),8.17(d,J=8.1Hz,2H)
15	H),5.67(br, 1H) 58,1246,1225,	6.85(8,111),7.1	),6.46(s,1H),6.	3.96(s,3H),4.64 [z,1H),7.71(d,J	,7.16(d,J=9.0F	., 1H),7.03(d,J=
20	s, III), 5. 10(8,21	311),5.19(8,211),	amorphouspowder <sup>1</sup> HNMR(CDCl <sub>3</sub> ) δ 2.54(s,3H),3.46(s,3H),3.75(s,3H),5.15(s,2H),5.67(brs,1H),5.90(s,1H),7.02(d,J=8.1Hz,1H),7.09(d,J=1.8Hz,1H),7.31-7.49(m,7H),7.55-7.62(m,2H) <sup>1</sup> IR(CHCl <sub>3</sub> )3526,1517,1483,1414,1389,1289,1246,1192,1114,1070,1010,937,818cm <sup>-1</sup>	H),3.79(a,3H),3 ,7.39(d,J=2.1H	2H),6.89(s,1H)	,J=84&2.1Hz
25	2(8,311),4.97(br 112,211) 463,1388,1339	(н,3II),3.77(н,: 13.970,876,82	(s,2H),5.67(brs H),7.55-7.62(m	(s,3H),3.53(s,3)	2H),5.20(e,5 2H) 5,1179,1120,10	(8,3H),6.96(dd 1Hz,2H)
30	m.p.178-180°C HINMR(CDCl <sub>3</sub> )	m.p.177-179°C. 4HNMR(CDCl <sub>3</sub> )	amorphouspowder <sup>1</sup> HNMR(CDCl <sub>3</sub> ) δ 2.54(s,3H),3.46(s,3H),3.75(s,3H),5.15(s,2H),5.67(brs,1H) ),7.02(d,J=8.1Hz,1H),7.09(d,J=1.8Hz,1H),7.31-7.49(m,7H),7.55-7.62(m,2H) IR(CHCl <sub>3</sub> )3526,1517,1483,1414,1389,1289,1246,1192,1114.,1070,1010,937	.73(a,3H),3.24( I),7.35(d.d,J=8	<sup>1</sup> HNMR(CDCl <sub>3</sub> ) δ 2.69(s,3H),3.14(s,3H),3.55(s,3H),3.80(s,3H),5.20(s,2H),6.89(s,1H) H),7.36-7.51(m,6H),7.75(d,J=8.4Hz,2H),8.23(d,J=8.4Hz,2H) IR(KBr)3427,1724,1685,1606,1509,1481,1369,1272,1235,1179,1120,1084,1017cm <sup>-1</sup>	5.16(s,3H),6.50 H),8.17(d,J=8.
35	H),2.40(s,3H), 7.32-7.34(m,2l 0-2800(hr), 161	II),2.69(a,311),311	1),3.46(s,3H),3 1,J=1.8Hz,1H),	1),1.81(s,3H),2 (d,J=8.4Hz,1H	H),3.14(s,3H), J=8.4Hz,2H),8 06,1509,1481,	H),3.77(8,3H),1
40	C 2-7.26(m,211), -3200(br),310(	m.p.177-179°C ЧИМИ(СЮСЬ) б 2.54(ж,3 49(m,9H),7.53-7.59(m,2H) IR(CHCls)1516,1476,1368,	owder N <sub>3</sub> ) & 2.54(s,3F IHz,1H),7.09(d 26,1517,1483,	la) & 1.76(s,3F	N <sub>3</sub> ) δ 2.69(s,3 m,6H),7.75(d,4 1724,1685,160	<sup>1</sup> HNMR(CDCl <sub>3</sub> ) δ 3.46(s,3H),3.77(s,3H),5.16(s,3H),6.50(s,3H),6 Hz,1H),7.34.7.50(m,5H),7.75(d,J=8.1Hz,2H),8.17(d,J=8.1Hz,2H)
45	m.p.178-180°C HINMR(CDC); 03(m,3H),7.22- IR(KB)3600-3	m.p.177-179°C HINMR(CDC!a 49(m,9H),7.53- IR(CHCla)1516	amorphouspowder 1HNMR(CDCl <sub>3</sub> ) δ 3 ),7.02(d,J=8.1Hz,11 IR(CHCl <sub>3</sub> )3526,151	'HNMR(CDC =6.9Hz,1H),6 4Hz,2H)	1HNMR(CDC H),7.36-7.51( IR(KBr)3427,	1HNMR(CDC Hz, 1H), 7.34-7
50	1.231	78:2-	-233	-234	-235	-236

Table 52

	$HNMR(\mathrm{CDCL}_3) \ \delta \ 3.44(\mathrm{s}, 3\mathrm{H}), 3.76(\mathrm{s}, 3\mathrm{H}), 3.96(\mathrm{s}, 3\mathrm{H}), 5.16(\mathrm{s}, 2\mathrm{H}), 5.69(\mathrm{s}, 1\mathrm{H}), 5.89(\mathrm{e}, 1\mathrm{H}), 6.49(\mathrm{s}, 1\mathrm{H}), 6.96(\mathrm{d}, \mathrm{d}, \mathrm{J} = 84\&2.1\mathrm{Hz}, 1\mathrm{H}), 6.49(\mathrm{g}, \mathrm{Hz}, \mathrm$
1-2:37	7.03(d,J=8.411z,111),7.09(d,J=2.111z,111),7.32-7.50(m,511),7.73(d,J=8.411z,2H),8.13(d,J=8.411z,211)
	IR(KBr)3497,3443,1708,1608,1585,1487,1460,1443,1395,1281,1113,1068,1008cm <sup>-1</sup>
ļ	HINMR(CI)Cl <sub>3</sub> ) & 2.69(s, 3H), 3.13(s, 3H), 3.53(s, 3H), 3.79(s, 3H), 3.96(s, 3H), 5.19(s, 2H), 6.87(s, 1H), 7.16(d, J=9.0Hz, 1H), 7.31-7.
1.238	50(m,711),7.71(d,J=8.411z,211),8.13(d,J=8.4Hz,2H)
	1R(RBr)1719,1608,1481,1366,1278,1118,1080,1017cm
	111111111111111111111111111111111111
-	111),7.21(d,J=8.411z,211),7.34(d,J=8.411z,211),7.36(d,J=8.7Hz,111),7.40(d,J=2.1Hz,111),7.71(d,J=8.7Hz,211),8.13(d,J=8.4Hz,z,z,z,z,z,z,z,z,z,z,z,z,z,z,z,z,z,z,
1.239	
	H(KBr)1718,1607,1519,1481,1355,1280,1232,1182,1121,1079,1018cm <sup>-1</sup>
	HNMR(CDCl <sub>3</sub> ) & 2.70(8,3H),3.03(8,3H),3.12(8,3H),3.55(8,3H),3.77(8,3H),5.18(8,2H),6.78-6.89(broad,1H),6.86(8,1H),7.14(d,
1.240	1.240 J=8.4Hz,1H),7.31-7.49(m,8H),7.55(d,J=8.4Hz,2H)
	IR(KBr)1604,1526,1483,1395,1374,1360,1292,1231,1177,1119,1078,1014cm <sup>-1</sup>
	111NMIR(CDC13) δ 2.37(8,3H),2.69(8,3H),3.05(8,3H),3.12(8,3H),3.55(8,3H),3.77(8,3H),5.14(8,2H),6.85(8,1H),6.81-6.91(broad,
1.241	2H),7.14(d,J=8.4Hz,1H),7.21(d,J=8.1Hz,1H),7.34(d,J=8.1Hz,2H),7.40(d,J=2.1Hz,1H),7.56(d,J=8.4Hz,2H)
_	IR(KBr)1605,1529,1484,1396,1356,1275,1233,1178,1121,1078,1016cm <sup>-1</sup>
	1HNMR(CDCl <sub>3</sub> ) & 1.76(9,3H), 1.81(9,3H), 2.73(9,3H), 3.03(9,6H), 3.22(9,3H), 3.56(9,3H), 3.77(9,3H), 4.63(d,J=6.6Hz,2H), 5.49(t,J=6.4)
9	=6.6Hz,1H),6.75-6.91(broad,2H),6.86(s,1H),7.08(d,J=8.7Hz,1H),7.34(d,d,J=8.7&2.1Hz,1H),7.39(d,J=2.1Hz,1H),7.55(d,J=8.
1.242	7Hz,1H)
	IR(KBr)1609,1529,1482,1363,1235,1178,1117,1078,1013cm <sup>-1</sup>
1.243	1R(KBr)3409,1608,1509,1464,1367,1230,1175,1149,1079,1018cm <sup>-1</sup>
7	

Table 53

55

HINMR(CDCH) \(\delta\) 1.72(s, 3H), 1.76(s, 3H), 2.56(m, 2H), 3.22(s, 3H), 3.02(s, 3H), 4.07(d, J=6.6Hz, 2H), 4.66(d, J=10.5Hz, 1H), 7.62(s, JH), 3.22(s, JH), 4.06(d, J=10.5Hz, 1H), 7.02(s, JH)   1.721(d, J=8.7Hz, IH), 7.02(s, JH)   1.721(d, J=9.014z, JH)   1.721(d, J=9.014z, JH)   1.721(d, J=8.7Hz, JH), 7.02(s, JH)   1.721(d, J=9.014z, JH)   1.721(d, J=9.0	50	45	40	35	30	25	20	15	10	5
	Ξ	1H),4.51(d,J=10.51 ),7.21(d,J=8.7Hz,11 IR(KBr)3307,1609,	1.72(8,3H),1.76(6 [z,1H),4.66(d,J= H),7.39(d,J=9.0H 1509,1465,1364,	s,3H),2.55(m, 10.5Hz,1H),4 [z,2H)7.71(d,c)	2[1],3.22(a,3H) .76(d,J=10.5H J=9.0Hz,2H) 152,1082,1021c	,3.45(s,311),3.7 z,111),5.24(brs	2(s,3H),4.07(	1,6.95(d,J=8	1),4.46(d,J=10 .7Hz,1H),7.02	6Hz, 8,1H
	15	m.p.182-184°C HINMR(CDCLs) & 3 IR(KBr)3434,3939,	2.42(s,3H),2.70(s 2937,1605,1522,	,3H),3.13(s,3)	H),3.53(s,3H),; 274,1235,1176,	3.77(s,311),5.19 1119,1086,101	(s,2H),6.86(s,	1H),7.13-7.58	3(m,12H)	
IR(KBr)172  "H NMR (C 6.6Hz, 2H), IR(KBr)160 foam "HNMR(CL 78(s, 1H),6, IR(KBr)360 m.p.104-10!		1HNMR(CDCl <sub>3</sub> ) & 2 54(m,8H),7.60(d,J= 1R(KBr)1728,1699 <sub>.</sub>	2.58(s,3H),3.21(s, 8.7Hz,2H),7.90(c, 1605,1513,1480,	,3H),3.55(s,3l d,J=2.1Hz,1H 1362,1239,11	H),3.77(s,3H),5 1) 175,1150,1083,	3.91(s,3H),5.26 1017cm <sup>-1</sup>	(m,2H),6.84(s	,1H),7.12(d,J	=9.0Hz,1H),7.	27.7.
1R(KBr)160 foam !HNMR(CI. .78(s,111),6. IR(KBr)360 m.p.104-10	<del></del>	IR(KBr)1729,1607, IH NMR (CDCl <sub>3</sub> ) 6.6Hz, 2H), 5.49 - 6	1512,1479,1366, 5 1.75 (s, 3H), 1 5.58 (m, 1H), 6.86	.79 (s, 3H), 2 (e, 1H), 6.93	151,1079,1015c .57 (s, 3H), 3.2 1 - 7.00 (m, 3H)	11 (s, 3H), 3.56 1, 7.38 (d, J = 8	(8, 3H), 3.78 .7Hz, 2H), 7.7	(s, 3H), 3.89 0 (d, J = 8.7F	(s, 3H), 4.63 (d	=
foam	$\top$	1R(KBr)1603, 1518	3, 1482, 1365, 1	239, 1176, 1	150, 1078cm <sup>-1</sup>					
m.p.104-108		foam HNMR(CDCla) δ 2 78(я, П1),6.84(d,J= IR(KBr)3600-2800(	2.30(br, 1H), 2.76- 1.8Hz, 1H), 6.97-7 (br), 1608, 1583, 1E	2.82(m,2H),3 7.01(m,3H),7. 517,1464,138	1.64-3.68(m,2H 37-7.49(m,5II) 7,1287,1247,12	)3.87(s,1H),5.1 ,7.56-7.61(m,2 225,1178,1082,	.4(s,2H),5.70(s H) 1015cm <sup>-1</sup>	,1H),6.70(dd	l,J=2.1,8.4Hz,	Н),6
(s, 1H), 6.66(s, 1H), 6.90(dd, J=2.1, 8.4Hz, 1H), 6.96-7.01(m, 4H), 7.04(d, J=1.8Hz, 1H), 7.37-7.48(m, 5H), 7.51-7.56(m, 2H) IR(KBr)3600-2800(br), 1608, 1593, 1518, 1474, 1462, 1379, 1294, 1251, 1226, 1183, 1109, 1078, 1040, 1008cm <sup>-1</sup>	<del></del>	m.p.104-105°C HNMR(CDCl3) & C (s,1H),6.66(s,1H),6. IR(KBr)3600-2800(	90(dd,J=7.5Hz,3l). 90(dd,J=2.1,8.4F). 90),1608,1593,16	H), 1.44-1.54(i Hz, 1H), 6.96-7 518, 1474, 146	m,2H),3.61(s,3 7.01(m,4H),7.0 <sup>,</sup> 2,1379,1294,12	H),3.71(t,J=6.6 4(d,J=1.8Hz,1F 251,1226,1183,	3Hz,2H),3.74( 1),7.37.7.48(n 1109,1078,10	3,3H),3.87(8,3,4,5H),7.61-7.1	3H),5.16(s,2H) 56(m,2H)	6.63

Table 54

	m.p.103·105°C
	111111111111111111111111111111111111
1.251	.16(s,211),5.63(s,111),6.65(s,111),6.90(dd,J=2.1,8.1112,111),6.96-7.01(m,311),7.04(d,J=2.114z,111),7.37-7.48(m,511),7.51-7.56(m,511),1.06(s,111),1.09(s,111),1.0
	(112,
	IR(KBr)3600-2800(br),1607,1518,1467,1375,1288,1251,1179,1113,1084,1020,1008cm-1
	m.p.111.5-112.5°C
	111111111111111111111111111111111111
1.252	.18(s,211),6.66(s,111),6.96-7.01(m,2H),7.10(d,J=8.711z,1H),7.26-7.55(m,9H)
	IR(KBr)3600-2800(br), 1609, 1518, 1464, 1440, 1375, 1355, 1289, 1269, 1249, 1181, 1170, 1107, 1080, 1019cm <sup>-1</sup>
	HNMR(CDCl3) \$ 1.76(9,3H), 1.82(9,3H), 3.45(9,3H), 3.76(9,3H), 4.62(d,J=8.4Hz,2H), 5.54(t,J=8.4Hz,1H), 6.49(9,1H), 6.91-6.99
1.253	(m,2H),7.05(d,J=1.5Hz),7.74(d,J=8.7Hz,2H),8.15(d,J=8.7Hz,2H)
	IR(KBr)3474,1687,1607,1509,1417,1397,1316,1287,1240,1109,1071,1006cm <sup>-1</sup>
	1HNMR(CDCl;1) & 2.39(s,3H),3.45(s,3H),3.76(s,3H),5.11(s,2H),6.49(s,1H),6.94(dd,J=8.4&1.8Hz,1H),7.04(d,J=8.4Hz,1H),7.0
1-254	6(d,J=1.8Hz),7.19-7.38(m,4H),7.73(d,J=8.4Hz,2H),8.14(d,J=8.4Hz,2H)
	IR(KBr)3549,3466,1668,1603,1518,1489,1465,1449,1421,1397,1372,1288,1236,1186,1117,1074,1017cm <sup>-1</sup>
	1HNMR(CDCl3) & 1.76(8,3H), 1.82(8,3H), 3.02(8,6H), 3.48(8,3H), 3.74(8,3H), 4.61(d,J=7.2Hz,2H), 5.53(t,J=7.2Hz,1H), 5.66(8,1H)
1.255	1.255 ),5.92(s,1H),6.47(s,1H),6.81(broad,2H),6.95(s,2H),7.06(s,1H),7.56(d,J=8.7Hz,2H)
	IR(KBr)3535,3494,3452,1606,1526,1487,1406,1357,1288,1242,1195,1112cm <sup>-1</sup>
	$HINMR(CDC(\mathbb{H}_1)) \delta = 2.39(8,3H), 3.02(8,6H), 3.48(8,3H), 3.74(8,3H), 5.10(8,2H), 5.66(8,1H), 5.93(8,1H), 6.47(8,1H), 6.82(d,J=8.4Hz, J=1.000000000000000000000000000000000000$
2	2H), 6.96(dd, J=8.1&1.8Hz, 1H), 7.02(d, J=8.1Hz, 1H), 7.08(d, J=1.8Hz, 1H), 7.23(d, J=7.8Hz, 2H), 7.34(d, J=7.8Hz, 2H), 7.56(d, J=8.1Wz, 2H), 7.50(d, J=8.1Wz, 2H), 7.00(d, J=
1-256	4Hz,2H)
	IN(INDI)abbd,ablo,toto,toto,toto,totolablo,tot

Table 55

0	·5	o	5	10	7 <b>5</b>	o	5	o	
1.257	<sup>1</sup> IINMR(CDCl <sub>3</sub> ) & 1.71(s,3H),1.76(s,3H),2.49.2.60(m,2H),3.44(s,3H),3.70(s,3H),4.06(t,J=6.3Hz,2H),4.48(d,J=6.0Hz,2H),4.7 1(d,J=8.7Hz,2H),5.23(t,J=8.7Hz,1H),5.37(broads,1H),6.84(s,1H),6.91-6.97(m,1H),6.92(d,J=8.4Hz,2H),7.18-7.23(m,2H),7.52 (d,J=8.7Hz,2H) 1R(KBr)3398,1612,1518,1465,1389,1232,1174,1131,1101,1081,1023cm <sup>-1</sup>	Cl.i) δ 1.71(s,3H),1.76(s,3H),2.49-2.60(m,2H),3.44(s,3H),3.70(s,3H),4.06(t,J=6.3Hz,2H),4.48(d,J=6.0Hz,2H),4.7, 2.11),5.23(t,J=8.7Hz,1H),5.37(bronds,1H),6.84(s,1H),6.91-6.97(m,1H),6.92(d,J=8.4Hz,2H),7.18-7.23(m,2H),7.52, 2.11) 3.1612,1518,1465,1389,1232,1174,1131,1101,1081,1023cm <sup>-1</sup>	6(s,3H),2.49.5 1H),5.37(broad 19,1232,1174,	2.60(m,2H),3 ds,1H),6.84(e,	44(s,3H),3.70( 1H),6.91-6.97 31,1023cm <sup>1</sup>	s,3H),4.06(t,J= (m,1H),6.92(d,	-6.3Hz,2H),4. J=8.4Hz,2H)	48(d,J=6.0Hz ,7.18-7.23(m,	,2H),4.7 2H),7.52
1.258	<sup>1</sup> HNMR(CDCl <sub>3</sub> ) δ :3.21(s,3H),3.41(s,3H),3.63(s,3H),3.77(s,3H),4.76(s,2H), 5.15(s,2H),6.94(s,1H),6.99(d,J=8.7Hz,1H),7.23-7.49 (m, 9H), 7.71(d,J=8.7Hz,2H)  7.49 (m, 9H), 7.71(d,J=8.7Hz,2H)  1R(KBr)3497,1738,1721,1697,1699,1362,1242,1152,1056,1017cm <sup>-1</sup>	:3.21(s,3H),3.4 (d,J=8.7Hz,2H) 1,1721,1607,160	11(s,3H),3.63(t	s,3H),3.77(s,3 1242,1152,100	H),4.76(s,2H),	5.15(s,2H),6	.94(s, 1H),6.99	)(d,J=8.7Hz,1	Н),7.23-
I.259	foam <sup>1</sup> HNMR(CDCl <sub>3</sub> ) δ 2.35(s,6H),2.73(s,3H),2.79(t,J=5.7Hz,2H),3.21(s,3H),3.31(s,3H),3.56(s,3H),3.78(s,3H),4.19(t,J=5.7Hz,2H ),6.84(s,1H),7.09(d,J=8.4Hz,1H),7.34-7.41(m,4H),7.66-7.71(m,2H) IR(KBr)3600-2700(br),1619,1481,1365,1273,1200,1177,1151,1120,1079,1015cm <sup>-1</sup>	Cl <sub>i.)</sub>	3(s,3H),2.79(t, '.34-7.41(m,4l	J=6.7Hz,2H), I),7.66.7.71(n	,3.21(6,3H),3.3 1,211) ,1120,1079,10	11(s,3H),3.56(s 115cm <sup>-1</sup>	,3H),3.78(e,3	H),4.19(t,J=5.	7Hz,2H
1.260	foam 'HNMR(CDCl <sub>3</sub> +CD <sub>3</sub> OD)	Cl <sub>3</sub> +CD <sub>3</sub> OD)	,J=5.1112,2H),	3.46(6,6H),3.7	73(s,6H),4.11((	t,J=5.1Hz,2H) 14,1062cm <sup>-1</sup>	,6.44(s,1H),6.	87-6.99(m,4H	),7.04(d
1-261	m.p.85-87℃ <sup>1</sup> HNMR(CDCl <sub>3</sub> ) δ 3.49(s,3H),3.75(s,3H),5.15(s,2H),5.23(brs,1H),5.68(brs,1H),5.89(s,1H),6.43(s,1H),6.95(dd,J=8.3,2.1Hz,1 H),7.03(d,J=8.3Hz,1H),7.08(d,J=2.1Hz,1H),7.08(t,J=8.7Hz,1H),7.33(ddd,J=8.7,2.1,1.2Hz1H),7.37-7.47(m,6H) IR(KBr)3410,1525,1488,1284,1248,1102,1010,759,704cm <sup>-1</sup>	3.49(s,3H),3.7 <sup>1</sup> ,1H),7.08(d,J=2 ,1488,1284,124	5(e,3H),5.15(e ?.1Hz,1H),7.0E 8,1102,1010,7	,2H),5.23(brs (t,J=8.7Hz,1]	,1H),5.68(brs, H),7.33(ddd,J=	1H),5.89(s, 1H =8.7,2.1,1.2Hz	),6.43(a,1H),6 1H),7.37-7.47	.95(dd,J=8.3, (m,6H)	2.1Hz,1

Table 56

1-262	m.p.138-140°C HINMR(CDCh) & 1.77(s,3H),1.82,(s,3H),3.21(s,3H),3.22(s,3H),3.48(s,3H),3.78(s,3H),4.64(d,J=6.5Hz,2H),5.51(t,J=6.5Hz,1 H),7.05(d,J=8.5Hz,1H),7.08(s,1H),7.14(dd,J=8.5,2.2Hz,1H),7.34(d,J=2.2Hz,1H),7.40(d,J=8.7Hz,2H),7.69(d,J=8.7Hz,2H),10
	.00(s,11l) IR(KBr)1693,1514,1470,1361,1348,1275,1239,1175,1151,979,969,867,845,815cm <sup>1</sup>
630	fonm 111NMIR(DMSO-da) & 1.74(8,311), 1.78(8,311), 3.32(8,311), 3.44(8,311), 3.76(8,311), 4.66(d, J=6.6Hz,211), 5.49(t, J=6.6Hz, 111), 7.11(8,
C02-1	1H),7.23.7.25(m,3H),7.48(d,J=8.6Hz,2H),7.77(d,J=8.6Hz,2H),13.1(brs,1H) 1R(KBr)3431,1737,1518,1471,1177,1151,972,864,849cm <sup>-1</sup>
, P.00 F	m.p. 153.5-155.5°C 1HNMR(CDCl <sub>3</sub> ) & 2.58(s,3H),3.52(s,3H),3.77(s,3H),5.21(s,2H),6.83(s,1H),7.04-7.24(m,5H),7.30-7.49(m,5H),7.56-7.65(m,2H
107.1	) IR(CHCl <sub>3</sub> )1607,1520,1481,1412,1368,1298,1267,1131,1080,1012,960,942,907,869,836,812cm <sup>-1</sup>
	dp>116℃ HNMR(CDCl <sub>3</sub> +CD <sub>3</sub> OD) δ 2.69(s,3H),3.15(s,3H),3.16(e,3H),3.57(s,3H),3.80(s,3H),5.21(s,2H),6.88(s,1H),7.19(d,J=8.4Hz,1H
I-265	),7.34-7.51(m,7H),7.83-7.90(m,2H),8.01-8.07(m,5H) 1R(KBr)3434,3028,2934,1596,1519,1460,1365,1308,1276,1173,1148,1119,1108,1012,946,841,819cm <sup>-1</sup>
1.966	m.p.136-138°C HNMR(CDC!3) & 3.43(8.3H),3.75(8,3H),5.19(8,2H),5.98(9,1H),6.44(8,1H),7.04-7.52(m,10H),7.57-7.65(m,5H)
	IR(CHCl <sub>3</sub> )3496, 1612, 1521, 1488, 1454, 1412, 1391, 1313, 1267, 1157, 1113, 1069, 1010, 934, 825cm <sup>-1</sup>

Table 57

1		
1.267	foam 111NMR(CDCE) & 2.38(8,311),3.10(8,311),3.21(8,311),3.41(6,311),3.67(8,311),3.77(8,311),5.11(8,211),6.93(8,111),7.09(d,J=8.6Hz, 111),7.21(d,J=8.2Hz,2H),7.27(d,J=2.1Hz,1H),7.35(d,J=8.2Hz,2H),7.38(d,J=8.9Hz,2H),7.70(d,J=8.9Hz,2H) 111(RBr)1733,1518,1471,1367,1297,1177,1151,1118,1059,971,862,815cm <sup>-1</sup>	,7.09(d,J=8.6Hz,
1-268		5.26(t, J=7.2Hz, 1 1, J=8.9Hz, 2H), 8.
1.269	m.p.206-208 C(dec.) HNMR(I)MSO-d <sub>6</sub> ) δ 2.32(s,3H),3.32(s,3H),5.65(s,2H),6.66(dd,J=8.2,2.1Hz,1H),6.79(d,J=2.1Hz,1H),6.83(s,1H),6 R4(d,J=8.6Hz,2H),6.89(d,J=8.2Hz,1H),7.20(d,J=8.0Hz,2H),7.38(d,J=8.0Hz,2H),7.46(d,J=8.6Hz,2H),8.91(s,1H),9.68(s,1H), R2.7(brs,1H) R(KBr)3413,1710,1612,1591,1520,1471,1377,1227,1083,1059,1013,837,809cm <sup>-1</sup>	1H),6.83(s,1H),6
1-270		1.8,8.1Hz,1H),7.
1-271	m.p.143-145°C !HNMR(CDCl <sub>3</sub> ) δ 2.70(s,3H),3.12(s,3H),3.54(s,3H),3.73(s,3H),3.84(s,3H),5.18(s,2H),6.83(s,1H),7.00-7.07(m,2H),7.14(d,J=8 1-271 .4Hz,1H),7.33-7.49(m,9H) IR(KBr)3434,2940,1609,1520,1482,1396,1369,1293,1283,1243,1178,1114,1080,1021,1009cm <sup>-1</sup>	1,2H),7.14(d,J=8

Table 58

	foam
į	411NMR(CDC3) & 3.45(8,3H),3.71(8,3H),3.86(8,3H),5.15(8,2H),6.67(8,1H),5.84(8,1H),6.42(8,1H),6.98(dd,J=1.8,8.4Hz,1H),7.
2/2-1	01.7.07(m,2H),7.11(d,J=1.8Hz,1H),7.35-7.45(m,8H)
	IR(CHCE)3534,3024,1617,1587,1517,1503,1483,1462,1409,1290,1247,1226,1215,1122,1104,1072,1013cm <sup>-1</sup>
	m.p.155-156°C
į	$4110MR(CD(CL)(2L)(2L) \delta - 1.76(8,3H), 1.81(8,3H), 2.42(8,3H), 2.73(8,3H), 3.23(8,3H), 3.53(8,3H), 3.77(8,3H), 4.63(4,J=6.6Hz,2H), 5.49(m,J=0.6Hz,2H), 5.49(m,J=0.6Hz,2H), 6.49(m,J=0.6Hz,2H), 6.49(m,J=0.6Hz,2Hz,2Hz,2Hz), 6.49(m,J=0.6Hz,2Hz,2Hz,2Hz), 6.49(m,J=0.6Hz,2Hz,2Hz,2Hz,2Hz), 6.49(m,J=0.6Hz,2Hz,2Hz,2Hz,2Hz,2Hz,2Hz,2Hz,2Hz,2Hz,2$
1-273	111),6.86(n,111),7.09(d,J=8.411z,111),7.25-7.53(n,611)
	IR(KBr)3434,2935,1605,1522,1465,1388,1365,1292,1273,1176,1119,1084,1011cm <sup>-1</sup>
	m.p.138-140°C
Ì	111111111111111111111111111111111111
1.274	.1H),6.83(s,1H),7.01-7.04(m,2H),7.08(d,J=8.4Hz,1H),7.26(d,J=0.6Hz,1H),7.34·7.43(m,3H)
	IR(KBr)3433,2937,1608,1519,1480,1400,1368,1292,1271,1244,1179,1112,1081,1011cm <sup>-1</sup>
	m.p.96.97°C
į	111111111111111111111111111111111111
1.275	1H),6.95-7.07(m,3H),7.25-7.28(m,2H),7.52-7.55(m,2H)
	IR(KBr)3479,2935,1613,1585,1523,1509,1490,1458,1415,1395,1362,1315,1249,1196,1112,1070,1005cm <sup>-1</sup>
	m.p.155:158°C
000	$^{1}$ HNMR(CDCl <sub>3</sub> ) $\delta$ 1.76(d,J=0.9Hz,3H),1.82(d,J=0.9Hz,3H),3.45(s,3H),3.86(e,3H),4.61(d,J=6.9Hz,2H),5.35(m,1H),5.68(e,1H)
1-276	),5.82(s,1H),6.42(s,1H),6.96-7.09(m,4H),7.35-7.41(m,2H)
	IR(KBr)3428,3005,2952,1613,1583,1517,1505,1487,1464,1451,1411,1387,1359,1317,1289,1245,1140,1101,1070,1013cm <sup>-1</sup>

Table 59

*55* 

50	.277	-279	-280	-281
45	m.p.173-175°C <sup>1</sup> HINMR(CDCl <sub>3</sub> l) δ 1.68(s,31l), 1.74(s,31l),2.42(s,31l),2.51-2.60(m,21l),2.75(s,3H),3.21(s,3H),3.53(s,3H),3.76(s,3H),4.07(t,J=6. <sup>2</sup> 9Hz,21l),5.21(m,1H),6.86(s,1H),7.06(d,J=8.7Hz,1H),7.25-7.28(m,2H),7.35(dd,J=2.1,8.7Hz,1H),7.40(d,J=2.1Hz,1H),7.50-7.5 <sup>3</sup> (m,21t) <sup>3</sup> (m,21t) <sup>3</sup> (m,21t)	IR(KIR <sub>1</sub> )34.34,2935,1610,1581,1522,1479,1399,1362,1283,1246,1180,1125,1114,1082,1046cm <sup>-1</sup> m.p.90-92°C iHNMR(CDCl <sub>3</sub> ) δ 1.69(s,3H),1.75(s,3H),2.42(s,3H),2.49-2.56(m,2H),3.45(s,3H),3.74(s,3H),4.06(t,J=6.6Hz,2H),5.22(m,1H),5.90(s,1H),6.94-7.06(m,3H),7.25-7.28(m,2H),7.52-7.55(m,2H)	m.p.82-84% !HNMR(CDCl <sub>3</sub> ) δ 1.69(s,3H),1.75(s,3H),2.49-2.56(m,2H),3.45(s,3H),3.71(s,3H),3.85(s,3H),4.06(t,J=6.6Hz,2H),5.22(m,1H),5.67(s,1H),5.82(s,1H),6.92-7.09(m,5H),7.35-7.43(m,2H) .67(s,1H),5.82(s,1H),6.42(s,1H),6.92-7.09(m,5H),7.36-7.43(m,2H) IR(KBr)3420,3326,2935,1615,1583,1518,1504,1486,1410,1316,1289,1249,1122,1101,1071,1018cm <sup>-1</sup>	m.p.166-168°C !HNMR(CDCl <sub>3</sub> ) & 2.38(8,3H),2.69(8,3H),3.11(9,3H),3.54(8,3H),3.73(8,3H),3.84(8,3H),5.14(8,2H),6.83(8,1H),7.00-7.44(m,11H ) IR(KBr)3434,2941,1608,1521,1498,1482,1466,1397,1368,1284,1243,1177,1113,1079,1019cm <sup>-1</sup>
40	6 1.68(s,311),1 1H),6.86(s,1H) 14,1606,1523,1	35,1610,1581,1 \$ 1.69(s,3H),1. 1H),6.46(s,1H),	5 1.69(s,3H),1. 1H),6.42(s,1H),	5 2.38(s,3H),2.
35	.74(s,3H),2.42( ,7.06(d,J=8.7H) 482,1388,1369	522,1479,1399 75(s,3H),2.42(s 6.94-7.06(m,3I	75(s,3H),2.49-5 6.92-7.09(m,5F	69(6,3H),3.11(0
30	(8,3II),2.51-2.6 1z,1H),7.25-7.5 (1277,1236,11	s,3H),2.49-2.66 H),7.25-7.28(m	2.56(m,2H),3.4 H),7.35-7.43(m	9,3H),3.54(8,3I
25	0(m,2H),2.75( 28(m,2H),7.35 77,1118,1085,	3(m,2H),3.46(e,2H),7.52-7.51	(5(s,3H),3.71(ε 1,2H) 10,1316,1289,	H),3.73(6,3H),:
20	8,3H),3.21(8,3 (dd,J=2.1,8.7)	3,3H),3.74(8,3l) 5(m,2H)	s,3H),3.85(s,3]	3.84(e,3H),5.1 1113,1079,10
15	H),3.53(6,3H), Hz,1H),7.40(d,	46cm <sup>-1</sup> H),4.06(t,J=6.0	H),4.06(t,J=6.(	4(e,2H),6.83(e
10	3.76(8,3H),4.07 J=2.1Hz,1H),7	3Hz,2H),5.22(m	5Hz,2H),5.22(m m <sup>-1</sup>	,1H),7.00-7.44(
5	(t,J=6. 50-7.5	,1H),5	,1H),5	n,11H

Table 60

1.282	m.p.109-1111°C HINMR(CDCla) & 2.39(s,3H),3.45(s,3H),3.71(s,3H),3.85(s,3H),5.10(s,2H),5.67(s,1H),5.83(s,1H),6.42(s,1H),6.95-7.41(m,11H)
	IR(CHCh)3497,2935,1610,1583,1519,1499,1481,1465,1399,1312,1274,1245,1186,1120,1102,1067,1012cm <sup>-1</sup>
	11 NMR(CDCl3) & 2.38(s,311), 2.68(s,311), 3.12(s,311), 3.53(s,111), 3.77(s,311), 5.14(s,211), 6.83(s,111), 7.10-7.24(m,511), 7.33(d,J=
1.283	8.4112,111),7.34(d,J=8.411z,211),7.40(d,J=2.111z,1H)7.56-7.64(m,2H)
	IR(KBr)1603,1520,1482,1367,1297,1277,1251,1232,1176,1120,1084,1012cm "!
	111NMR(CDCh) & 2.39(8,3H), 3.45(8,3H), 3.75(8,3H), 5.10(8,2H), 5.68(8,1H), 5.88(8,1H), 6.44(8,1H), 6.95(dd, J=8.4&2.1Hz,1H), 7
1-284	.03(d,J=8.4Hz,1H),7.07(d,J=2.1Hz,1H),7.08-7.29(m,4H),7.34(d,J=8.4Hz,2H),7.56-7.65(m,2H)s
	IR(KBr)3504,3330,1604,1596,1490,1461,1455,1424,1360,1318,1242,1223,1121,1071,1009cm <sup>-1</sup>
	411NMR(CDCl3) & 2.69(s,3H),3.13(s,3H),3.56(s,3H),3.78(s,3H),5.19(s,2H),6.86(s,1H),7.05-7.16(m,1H),7.15(d,J=8.4Hz,1H),7.
1.285	30-7.49(m,10H)
	IR(KBr)1610,1583,1517,1475,1455,1359,1296,1270,1239,1180,1116,1088,1013cm <sup>-1</sup>
	111NMR(CDC33) & 3.47(s,3H),3.75(s,3H),5.15(s,2H),5.68(s,1H),5.89(s,1H),6.46(s,1H),6.95(dd,J=8.4&2.1Hz,1H),7.03(d,J=8.4
1.286	IIz,1II),7.04·7.12(m,2H),7.35·7.51(m,9II)
	IR(KBr)3543,3346,1612,1586,1666,1518,1602,1479,1407,1362,1320,1239,1110,1068,1006cm <sup>-1</sup>
	1 HNMR(CDC1.) δ 2.68(e, 3H), 3.14(e, 3H), 3.58(e, 3H), 3.81(e, 3H), 5.20(e, 2H), 6.88(e, 1H), 7.16(d, J=8.7Hz, 1H), 7.32-7.49(m, 7H), 7.10(m, σ)
1-287	60.7.68(m,1H),7.98-8.04(m,1H),8.24-8.29(m,1H),8.44-8.47(m,1H)
	IR(KBr)1609,1531,1362,1270,1239,1178,1122,1085,1014cm <sup>-1</sup>
	"HNMR(CDCI3) & 3.49(8,3H),3.78(8,3H),5.17(8,2H),5.71(8,1H),5.83(8,1H),6.49(8,1H))6.95(dd,J=12.3&1.2Hz,1H),7.02(d,J=1
1.288	2.3Hz,1II),7.08(d,J=1.2Hz,1H),7.33-7.50(m,5H),7.60-7.68(m,1H),7.97-8.06(m,1H),8.21-8.27(m,1H),8.52(a,1H)
	IR(KBr)3528,3358,1588,1527,1499,1454,1406,1348,1314,1241,1122,1070,1009cm <sup>-1</sup>

Table 61

HINMR(CDCbL <sub>1</sub> ) & 2.68(s,3H),3.13(s,3H),3.55(s,3H),5.19(s,2H),6.19.6.88(m,1H),6.86(s,1H),7.02.7.10(m,2H),7.16(d,1H),7.02.7.10(m,2H),7.16(d,1H),7.02.7.10(m,2H),7.16(d,1H),7.02.7.10(m,2H),7.16(d,1H),7.02.7.10(m,2H),7.16(d,1H),7.02.7.10(m,2H),7.14(d,1H),7.02.7.10(m,2H),7.14(d,1H),7.02.7.10(m,2H),7.14(d,1H),7	50	45	40	. <b>35</b>	30	25	20	15	10	5
		HNMR(CDCl3) & 5	2.68(s,3H),3.13(s	s,3H),3.55(s,3F	4),3.77(s,3H),£	5.19(8,2H),6.79	).6.88(m,1H),6	.86(s,1H),7.05	2-7.10(m,2H),	7.16(
	-289	d,J=8.4Hz,1H),7.26 IR(KBr)3479,3388,	3-7.50(m,8H) 1623,1603,1518,	,1478,1396,138	58,1176,1118,	1081,1013cm	<del>.</del>			
		HINMR(CDCla) &	3.11(s,3H),3.45(a	s,311),3.77(s,31	I),5.17(s,2H),6	6.05(a, 1H), 6.40	5(8,111))7.00-7.	18(m,1H),7.1·	4(d,J=8.4Hz,1	Н),7
	.290	.33-7.50(m,9H),7.52	2(d, J=2.1Hz, 1H)							
		IR(KBr)3504,1612,	1578, 1519, 1498,	,1464,1391,13	55, 1290, 1276,	1239,1183,116	1,1107,1070,1	004cm <sup>-1</sup>		
		HINMIK(CDCB+CB	3,OD) 8 3,44(m,5	311), 3, 75(4, 311),	,4.74(H,211),5.1	13(8,211), 111),6.	.86-6.95(m,3H)	,6.99(d,J=8.7	Hz, 111), 7.30-7	.48(
	167-	m,7H),7.52(d,J=8.7	Hz,2H)							
		IR(KBr)3433,1707,	1611,1518,1473,	,1463,1379,128	50,1174,1132,	1089, 1058, 101	6cm <sup>1</sup>			
	19.5	HINMR(CDCla+CD	3.0D) 8 3.41(s,3	11),3.62(s,311),	3.75(s,3H),4.7	4(s,2H),5.15(s,	,2H),6.87-7.01(	(m,4H),7.30-7	.55(m,9H)	
	23.5	IR(KBr)3386,1722,	1611,1518,1464,	,1343,1271,12	15,1233,1215,	1168,1082,106	0,1021cm <sup>-1</sup>			
	293	HNMR(CDCla) & 2	2.38(s,3H),2.69(s	s,3H),3.12(s,3E	I),3.56(s,3H),3	1.78(8,3H),5.14	(s,2H),6.85(s,1	H),7.05-7.45(	(m, 12H)	
		IK(KBF)1007, 1584,	1019,1479,1401,	1304,1340,120	50,1237,1178,	1104,1119,100	1,1010cm			
		HINMR(CDCI3) & 3	1.45(s,3H),3.75(s	,3H),4.36(d,J=	2.1Hz,1H),4.5	i5(a,2H),4.76(d	1,J=2.1Hz,1H),	6.45,(s,1H),6.	92(d,J=8.7Hz,	2H)
		,6.99(d,J=8.4Hz,1H	),7.20(dd,J=1.5a	nd8.4Hz,1H),	7.11(d,J=1.5H	z,1H),7.53(d,J	=8.7Hz,2H)			
		IR(Nujol)3425,1612	,1588,1523,148	7,1295,1268,12	228,1113,1069	,825cm <sup>-1</sup>				
		foam								
	y S	HINMR(CDCE) & 2	78(s,3H),3.21(s	,311),3.23(8,31	I),3.55(a,3H),3	1.78(8,311),4.79	(d,J=6.6Hz,2H	),6.21(t,J=6.6	3Hz, 1H),6.85(e	Н1,
IR(Nujol)1632, 1607, 1519, 1482, 1180, 1150, 1079, 1011, 976, 814, 798cm <sup>-1</sup>	3	),7.08(d,J=8.7Hz,1H	I),7.37(dd,J=8.7,	,2.1Hz,1H),7.3	8(d,J=8.7Hz,2	H),7.41(d,J=2	.1Hz,1H),7.68(	d,J=8.7Hz,2F	<b>-</b>	
		IR(Nujol)1632,1607	,1519,1482,1180	0,1150,1079,10	11,976,876,81	14,798cm <sup>-1</sup>				

Table 62

· 20

	foam
1.296	HINMR(CD <sub>3</sub> (OD) § 3.38(8,311), 3.68(8,311), 4.12(brs,211), 4.65(brs,211), 5.01(m,211), 6.43(s,111), 6.78(dd,J=8.7,1.8Hz,111), 6.85(d,J=8.7,211), 6.86(d,J=1.8Hz,111), 6.94(d,J=8.7Hz,111), 7.46(d,J=8.7Hz,211), 6.86(d,J=1.8Hz,111), 6.94(d,J=8.7Hz,111), 7.46(d,J=8.7Hz,211), 6.86(d,J=1.8Hz,111), 6.94(d,J=8.7Hz,111), 7.46(d,J=8.7Hz,211), 6.86(d,J=8.7Hz,111), 6.86(d,J=8.
1.297	fonin 'HNMR(CD <sub>3</sub> (UD) δ 3.38(s,3H),3.68(s,3H),4.73(d,J=5.1Hz,2H),4.23(d,J=5.1Hz,2H),5.83(m,2H),6.43(s,1H),6.79(dd,J=8.7,1.8  Hz,1H),6.85(d,J=8.7,2H),6.86(d,J=1.8Hz,1H),6.94(d,J=8.7Hz,2H)  IR(Nujol)3393,1611,1588,1523,1489,1460,1248,1114,1071,1013,940,824cm <sup>-1</sup>
1.298	foam 'HNMR(CD <sub>3</sub> OD) & 1.77(8,3H),3.38(8,3H),3.68(8,3H),4.00(8,2H),5.72(d,J=6.3Hz,2H),5.81(t,J=6.3Hz,1H),6.43(8,1H),6.79(dd, J=8.7,1.8Hz,1H),6.85(d,J=8.7,2H),6.85(d,J=1.8Hz,1H),6.94(d,J=8.4Hz,1H),7.46(d,J=8.7Hz,2H) IR(Nujol)3384,1608,1585,1523,1494,1457,1262,1242,1227,1116,1078,1008,985,822,781cm <sup>-1</sup>
1.299	foam 1HNMR(CD <sub>3</sub> OD) δ 1.87(8,3H),3.83(8,3H),3.68(8,3H),4.17(8,2H),4.69(d,J=6.6Hz,2H),5.68(t,J=6.3Hz,1H),6.43(8,1H),6.79(dd, J=8.7,1.8Hz,1H),6.85(d,J=8.4,2H),6.85(d,J=1.8Hz,1H),6.94(d,J=8.4Hz,1H),7.46(d,J=8.7Hz,2H) IR(Nujol)3350,3236,1606,1589,1524,1490,1463,1247,1227,1079,1011,992,819,790cm <sup>-1</sup>
1.300	foam 'HNMR(CDCl <sub>3</sub> ) © 1.87(8,3H),2.10(8,3H),3.45(8,3H),3.74(8,3H),4.68(8,2H),4.71(d,J=6.0Hz,2H),5.77(t,J=6.0Hz,1H),6.44(6,1H ),6.92(d,J=8.0Hz,2H),6.95(m,2H),7.07(brs,1H),7.53(d,J=6.0Hz,2H) IR(Nujol)3409,1724,1612,1587,1623,1489,1460,1239,1114,1071,1012,940,825,781cm <sup>-1</sup>

Table 63

55

<b>50</b> .	45	40	35	30	25	20	15	10	5
1-301	HINMR(CD3OD)  =7.8,3.6,2.1Hz,1	03(01))	Hz, HI), 3.38(s, . 80(dd, J=8.4, 1.6	3H),3.68(8,3H), 3Hz, 1H),6.85(d	,4.06(dd,J=9.9, ,J=8.7.2H),6.8	7.8Hz,1H),4.2 7(d.J=1.8Hz.1]	0(dd,J=9.9,3. H).6.96(d.J=8	6Hz,1H),4.74( 3.4Hz,1H),7.46	f,bbb
		8.711z,2H) R(Nujol)3282,1655,1612,1588,1523,1489,1460,1254,1226,1072,1013,940,825cm <sup>-1</sup>	523.1489.1460	1254.1226.107	2 1013 940 82				
	foam								
309	IR(CD	$^{(4)}$ 0.30(8,311),3.68(8,311),4.75(4,J=5.111z,211),6.44(8,111),6.80(dd,J=8.4,1.8Hz,1H),6.85(d,J=8.4,2H),6.92(d,J=8.4,118),6.92(d,J=8.4,18),6.92(d,J=8.4,18),6.92(d,J=8.4,18),6.92(d,J=8.4,18),6.92(d,J=8.4,18),6.92(d,J=8.4,18),6.92(d,J=8.4,18),6.92(d,J=8.4,18),6.92(d,J=8.4,18),6.92(d,J=8.4,18),6.92(d,J=8.4,18),6.92(d,J=8.4,18),6.92(d,J=8.4,18),6.92(d,J=8.4,18),6.92(d,J	.68(8,311),4.75(	d,J=5.111z,211),	,6.44(8,111),6.8	0(dd,J=8.4,1.8	Hz, 1H),6.85(	d,J=8.4,2H),6.	92(d,
70c-l	J=1.8Hz,1H),6.9	1),6.99(d,J=8.7Hz,1H),7.42(t,J=5.1Hz,1H),7.46(d,J=8.4Hz,2H)	1,7.42(t,J=5.1H	z, 1H),7.46(d,J=	=8.4Hz,2H)				
	IR(Nujol)3474,3;	74,3316,1678,1611,1584,1523,1487,1458,1268,1231,1115,1171,1011,942,824,758cm <sup>-1</sup>	584,1523,1487,	,1458,1268,123	11,1115,1171,1	011,942,824,7	58cm <sup>-1</sup>		
	foam								
303	HINMR(CD3OD)	3OD) 6 1.24(d,J=7.2Hz,3H),3.38(s,3H),3.68(s,3H),4.12(q,J=7.2Hz,2H),4.76(d,J=4.8Hz,2H),6.43(s,1H),6.80(dd,J=7.2Hz,2H),4.75(d,J=4.8Hz,2H),6.43(s,1H),6.80(dd,J=7.2Hz,2H),4.75(d,J=4.8Hz,2H),6.43(s,1H),6.80(dd,J=7.2Hz,2H),4.75(d,J=4.8Hz,2H),6.43(s,1H),6.80(dd,J=7.2Hz,2H),4.75(d,J=4.8Hz,2Hz,2Hz,2Hz,2Hz,2Hz,2Hz,2Hz,2Hz,2Hz,2	Hz,3H),3.38(s,	3H),3.68(s,3H),	4.12(q,J=7.2H:	z,2H),4.75(d,J	=4.8Hz,2H),6	.43(s, 1H),6.80	(dd,J
000	=8.4,1.8Hz,1H),6	1H), 6.85(d, J=8.7, 2H), 6.91(d, J=1.8Hz, 1H), 6.99(d, J=8.4Hz, 2H), 7.46(d, J=8.7Hz, 2H), 7.52(t, J=4.8Hz, 1H)	6.91(d,J=1.8H;	z,1H),6.99(d,J=	-8.4Hz,2H),7.4	6(d,J=8.7Hz,2.	H),7.52(t,J=4	.8Hz,1H)	
	IR(Nujol)3306,17	IR(Nujol)3306,1715,1612,1587,1523,1487,1460,1266,1232,1115,1070,824,760cm <sup>-1</sup>	523,1487,1460,	1266,1232,111	5,1070,824,76	0cm <sup>-1</sup>			
	foam								
	'HNMR(CDCl3)	Cl <sub>3</sub> ) δ 2.34(8,3H),2.38(8,3H),2.70(8,3H),3.07(8,3H),3.21(8,3H),3.56(8,3H),3.78(8,3H),5.13(8,2H),6.84(8,1H),7.03(	8(s,3H),2.70(s,	3H), 3.07(6, 3H)	,3.21(a,3H),3.5	6(s,3H),3.78(s	,3H),5.13(8,2	H),6.84(s, 1H),	7.03(
-304	d,J=7.8Hz,1H),7.06(s,1H),7.18(d,J=8.4Hz,1H),7.28(d,J=7.8Hz,1H),7.36(dd,J=2.1,8.4Hz,1H),7.38(d,J=8.7Hz,2H),7.40(d,J=2.1,8.4Hz,1H),7.06(s,1H),7.18(d,J=8.7Hz,2H),7.40(d,J=2.1,8.4Hz,1H),7.06(s,1H),7.18(d,J=8.7Hz,2H),7.40(d,J=2.1,8.4Hz,1H),7.18(d,J=8.7Hz,2H),7.40(d,J=2.1,8.4Hz,1H),7.18(d,J=8.7Hz,2H),7.40(d,J=2.1,8.4Hz,1H),7.18(d,J=8.7Hz,2H),7.40(d,J=2.1,8.4Hz,1H),7.18(d,J=8.7Hz,2H),7.40(d,J=2.1,8.4Hz,1H),7.18(d,J=3	.06(s, 1H), 7.18(d,	J=8.4Hz,1H),7	.28(d,J=7.8Hz,	1H),7.36(dd,J=	=2.1,8.4Hz,1H)	7.38(d,J=8.7	7Hz,2H),7.40(d	1,3=2
	.1Hz, 1H),7.68(d,	38(d,J=8.711z,2H)							
	1R(KBr)1611,151	1,1518,1480,1365,1177,1151,1080,876,816cm-1	7,1151,1080,8	76,816cm <sup>-1</sup>					
	foam								
	14NMR(CDCl3) & 1.25(d,J=6.9Hz,6H),2.67(s,3H),2.93(q,J=6.9Hz,1H)3.13(s,3H),3.21(s,3H),3.56(s,3H),3.78(s,3H),5.15(s,2H	5 1.25(d,J=6.9H;	z,6H),2.67(s,3E	I),2.93(q,J=6.9]	Hz, 1H)3.13(8,3	tH),3.21(s,3H),	3.56(s,3H),3.	78(s,3H),5.15(	8,2H
-305	),6.84(e,1H),7.16(d,J=8.7Hz,1H),7.26(d,J=8.4Hz,2H),7.34(dd,J=2.4,8.7Hz,1H),7.38(d,J=8.4Hz,4H),7.40(d,J=2.4Hz,1H),7.68	(d,J=8.7Hz,1H),7	7.26(d,J=8.4Hz,	,2H),7.34(dd,J:	=2.4,8.7Hz,1H)	),7.38(d,J=8.4I	4z,4H),7.40(d	1,J=2.4Hz,1H)	7.68
	(d,J=8.4Hz,2H)		,						
	IR(KBr)1609,1519,1481,1365,1177,1151,1080,875,819cm <sup>-1</sup>	9,1481,1365,117	7,1151,1080,8	75,819cm <sup>-1</sup>					

Table 64

1.306	foam HINMR(CDC1s.) & 2.62(s.3H),3.15(s,3H),3.21(s,3H),3.55(s,3H),3.77(s,3H),5.36(s,2H),6.84(s,1H),7.18(d,J=8.7Hz,1H),7.26(s, HI),7.33(dd,J=2.1,8.4Hz,1H),7.38(d,J=8.7Hz,2H),7.41(d,J=2.1Hz,1H),7.51(m,2H),7.57(dd,J=1.8,8.4Hz,1H),7.68(d,J=8.7Hz,2H),7.84-7.93(m,4H) 2H),7.84-7.93(m,4H) HR(KBr)1608.1519,1480,1364,1177,1151,1079,876,819,797cm
1.307	fourm !!INMR(CDC!a) & 2.64(s,311),3.21(s,311),3.28(s,311),3.55(s,311),5.77(s,311),5.51(s,211),6.83(s,111),7.18(d,J=8.4Hz,111),7.31(dd .J=2.4,8.4Hz,1H),7.37(d,J=8.7Hz,2H),7.42(d,J=2.4Hz,1H),7.58(dt,J=2.4,7.2Hz,1H),7.67(d,J=8.7Hz,2H),7.74(d,J=8.4Hz,1H) .7.76(dt,J=2.4,7.2Hz,1H),7.85(d,J=7.2Hz,1H),8.06(d,J=7.2Hz,1H),8.23(d,J=7.2Hz,1H) .1.16(dt,J=2.4,7.2Hz,1H),7.85(d,J=7.2Hz,1H),8.06(d,J=7.2Hz,1H),8.23(d,J=7.2Hz,1H)
1-308	foam 'HNMR(CDC\begin{align*} 10.00
1-309	m.p.221-222℃ <sup>1</sup> HNMR(CDCl <sub>3</sub> ) δ 2.36(a,3H),2.38(a,3H),3.46(a,3H),3.75(a,3H),5.09(a,2H),6.45(a,1H),6.92(d,J=8.4Hz,2H),6.98(dd,J=2.1,8.1 Hz,1H),7.06(d,J=8.4Hz,1H),7.08(d,J=2.1Hz,1H),7.08(a,1H),7.28(d,J=8.4Hz,1H),7.53(d,J=8.4Hz,2H) IR(KBr)3475,1610,1522,1489,1402,1245,1181,1164,1110,1071,821,805cm <sup>-1</sup>
1.310	m.p.153-155°C 'HINMR(CDCl <sub>3</sub> ) & 1.27(d,J=6.9Hz,6H),2.95(q,J=6.9Hz,1H),3.45(s,3H),3.74(s,3H),5.11(s,2H),6.45(s,1H),6.91(d,J=8.4Hz,2H), 6.96(dd,J=2.1,8.1Hz,1H),7.03(d,J=8.1Hz,1H),7.08(d,J=2.1Hz,1H),7.28(d,J=8.1Hz,2H),7.38(d,J=8.1Hz,2H),7.53(d,J=8.4Hz,2H) 2H) IR(KBr)3486,1611,1522,1489,1265,1113,1072,1011,823cm <sup>-1</sup>

Table 65

55

<i>50</i> .	45	40	35	30	25	20	15	10	5
= = = = = = = = = = = = = = = = = = = =	m.p. 176-177°C 111NMR(CDCla) & 3.45(s,311),3.75(s,311),5.32(s,211),6.45(s,111),6.91(d,J=8.4Hz,211),6.97(dd,J= ,111),7.10(d,J=2.1Hz,114),7.53(d,J=8.4Hz,214),7.50-7.57(m,311),7.82-7.92(m,414) 1R(KBr)3376,1610,1522,1488,1469,1401,1263,1246,1173,1112,1073,1014,1002,819,806cm <sup>-1</sup>	3.45(8,3H),3. Hz,1H),7.53(d, 0,1522,1488,1	75(8,311),5.32(t, ,J=8.4112,211),7.	s,211),6.45(s, 7.50-7.57(m,5	HI), 6.91(d, J= HI), 7.82·7.92 HI2.1073.101	7°C)(3a) \(\delta\) 3.45(s,31l),3.75(s,31l),5.32(s,2ll),6.45(s,11l),6.91(d,J=8.41lz,21l),6.97(dd,J=2.1,8.4Hz,11l),7.06(d,J=8.4Hz,11l),7.50(d,J=8.4	/(dd,J=2.1,8.4	Hz,1H),7.06(d,	J=8.4Hz
1.312	m.p.235-237°C HINMR(CDCh) & 3.44(s,3H),3.73(s,3H),5.49(s,2H),6.44(s,1H),6.92(d,J=8.4Hz,2H),6.93(dd,J=2.1,8.4Hz,1H),7.14(d,J=2.1Hz,1Hz,1Hz,1Hz,1Hz,1Hz,1Hz,1Hz,2Hz,1Hz,2Hz,2Hz,2Hz,2Hz,2Hz,2Hz,2Hz,2Hz,2Hz,2	7°C (Cla) & 3.44(s,3H),3.73(s,3H),5.49(s,2H),6.44(s,1H),6.92(d,J=8.4H) (J=8.4Hz,1H),7.38(d,J=8.4Hz,1H),7.52(d,J=8.4Hz,2H),7.58(dd,J= H),8.21(d,J=7.2Hz,1H),8.22(d,J=7.2Hz,1H) (8,1609,1522,1488,1268,1229,1205,1114,1072,1016,825,782cm <sup>-1</sup>	73(8,3H),5.49(§ ,J=8.4Hz,1H),7 ),8.22(d,J=7.2,168,1229,1205,	8,2II),6.44(s, 1 7.52(d, J=8.41 Hz,1H) 1114,1072,10	),6.92(d,J=   z,2  ),7.58(d	7°C) (Cla) & 3.44(s,3H),3.73(s,3H),5.49(s,2H),6.44(s,1H),6.92(d,J=8.4Hz,2H),6.93(dd,J=2.1,8.4Hz,1H),7.14(d,J=2.1Hz,1Hz,1Hz,1Hz,1Hz,1Hz,1Hz,1Hz,1Hz,1Hz,	((dd,J=2.1,8.4	Hz,1H),7.14(d,	J=2.1Hz),7.86(d,
I-313		1°C (Cl <sub>3</sub> ) δ 3.45(8,3H),3.75(8,3H),5.22(8,3 (d,J=8.4Hz,2H),7.68(d,J=8.4Hz,2H), 3,1613,1523,1490,1326,1251,1166,1	75(8,3H),5.22(( (d,J=8.4Hz,2H)	s,2H),6.45(s, I), 1113,1066,10	1H),6.92(d,J=	8.4Hz,2H),6.90	3(br.s,2H),7.1	1(br.s, 1H), 7.53	(d,J=8.4
1.314	m.p.92-93°C 'HNMR(CDCl <sub>3</sub> ) & 1.63(8,3H),1.74(8,3H),2.34-2.39(m,1H),2.67-2 m,2H),6.78-6.97(m,4H),7.20(d,J=7.2Hz,1H),7.56(d,J=8.0Hz,2H) IR(KBr)3410,2932,1613,1519,1473,1444,1390,1263,1228,1174c	(13) 6 1.63(8,3H), 1.74(8,3H), 2.34-2.39(m,1H), 2.67-2.72(16) 6.97(m,4H), 7.20(d, J=7.2Hz,1H), 7.56(d, J=8.0Hz,2H) 0,2932,1613,1519,1473,1444,1390,1263,1228,1174cm <sup>-1</sup>	74(8,3H),2.34-2 =7.2Hz,1H),7.5 73,1444,1390,	2.39(m,1H),2. 56(d,J=8.0Hz 1263,1228,11	.67-2.72(m,2F ,2H) 174cm <sup>-1</sup>	Cls) δ 1.63(s,3H),1.74(s,3H),2.34-2.39(m,1H),2.67-2.72(m,2H),3.47(s,3H),3.74(s,3H),4.52-4.54(m,2H),5.30-5.33( 6.97(m,4H),7.20(d,J=7.2Hz,1H),7.56(d,J=8.0Hz,2H) 0.2932,1613,1519,1473,1444,1390,1263,1228,1174cm <sup>-1</sup>	74(8,3H),4.52	.4.54(m,2H),6.	30-5.33(
1.315		Cl <sub>3</sub> ) δ 1.76(8,3H),1.83(8,3H),2.17-2.4 7.28-7.43(m,5H),7.73(d,J=8.6Hz,2H) 2,2938,1731,1513,1469,1366,1180,11	33(s,3H),2.17.5 3(d,J=8.6Hz,2l 69,1366,1180,	2.40(m,1H),2. H) 1151,970,868	.65-2.71(m,2F	Cl <sub>3</sub> ) δ 1.76(8,3H), 1.83(8,3H), 2.17·2.40(m,1H), 2.65·2.71(m,2H), 3.24(8,3H), 3.46(8,3H), 3.80(8,3H), 4.50·4.52(m,2H) 7.28·7.43(m,5H), 7.73(d,J=8.6Hz,2H) 2.2938,1731,1513,1469,1366,1180,1151,970,868cm <sup>-1</sup>	.46(8,3H),3.80	(8,3H),4.50-4.E	.2(m,2H

Table 66

	m.p.179·180℃
	111111111111111111111111111111111111
918:-1	),7.17.7.52(m,5H),7.69(d,J=8.4Hz,2H)
	IR(KBr)3427,2934,1612,1576,1519,1465,1443,1415,1376,1228,1174,846cm · ·
	m.p.141-142°C
ţ	$ \text{HNMR}(\text{CDCM}_3) \ \delta \ 1.75(\text{s}, 3\text{H}), 1.80(\text{s}, 3\text{H}), 3.21(\text{s}, 3\text{H}), 3.39(\text{s}, 3\text{H}), 3.68(\text{s}, 3\text{H}), 3.77(\text{s}, 3\text{H}), 4.61(\text{d}, \text{J} = 7.2\text{Hz}, 2\text{H}), 5.50(\text{t}, \text{J} = 7.0\text{Hz}, 1\text{H}) \ \text{H} $
<u> </u>	),6.93(s,111),6.99-7.33(m,511),7.57-7.65(m,211)
	IR(KBr)3432,2938,1724,1519,1474,1365,1346,1294,1262,1244,1220,1163,1119,1059,953,842,805cm <sup>-1</sup>
	m.p.127-128°C
9	"IINMR(CDCL3) & 1.68(s,3H), 1.74(s,3H), 2.54(dt,J=4.2,4.6Hz,2H),3.20(s,3H),3.39(s,3H),3.68(s,3H),3.76(s,3H),4.05(t,J=4.4H
1-318	z,2H),5.21(t,J=4.6Hz,1H),6.93(s,1H),7.00(d,J=5.6Hz,1H),7.11·7.18(m,2H),7.25·7.35(m,3H),7.61(dd,J=3.8,5.8Hz)
	IR(KBr)3447,2974,2940,1740,1519,1471,1365,1343,1295,1262,1226,1182,1161,1119,1058,952,843,814cm <sup>-1</sup>
	m.p.171-172°C
3.0	111NMR(CDCl <sub>3</sub> ) δ 2.38(s,311),3.10(s,311),3.39(s,311),3.66(s,311),3.77(s,311),5.11(s,211),6.93(s,111),7.07·7.36(m,911),7.61(dd,J=
1.019	3.4,5.6Hz,2H)
	IR(KBr)3431,2937,1724,1519,1474,1440,1346,1296,1259,1243,1222,1165,1121,1060,953,843,804cm <sup>-1</sup>
	m.p. 166-166°C
000	1HNMR(CDCl <sub>3</sub> ) 6 3.40(8,3H),3.69(8,3H),3.77(8,3H),5.13(8,2H),5.70(brs,1H),6.82-7.42(m,5H),7.39-7.42(m,5H),7.62(dd,J=5.4
056-1	,8.6Hz)
	IR(KBr)3550,3481,2956,1723,1519,1467,1435,1344,1285,1261,1238,1223,1130,1058,1013,840cm <sup>-1</sup>

Table 67

5	ro .	1.321	1.322	1.323	1.324	.325
4	5	m.p.169-160°C HINMR(CDCL <sub>3</sub> ) & 3.11(a,3H),3.40(a,3H),3.66(a,3H),3.77(a,3H),5.16(a,2H),6.93(a,1H),7.07-7.49(m,5H),7.62(dd,J=3.0,8.4Hz,2 H) IR(KBr)3441,2952,1732,1519,1469,1445,1381,1356,1342,1291,1273,1243,1226,1162,1119,1081,1057,999,950,842,805cm <sup>-</sup>	m.p. 160-161 C 'IINMR(CDCl <sub>3</sub> ) & 2.37(s,311),2.93(s,311),3.19(s,311),3.22(s,311),3.55(s,311),3.79(s,311),5.23(s,211),6.86(s,111),7.20(d,J=8.1Hz, 211),7.30(d,J=8.1Hz,211),7.36-7.41(m,211),7.64-7.70(m,211),7.74(d,J=2.1Hz,111),7.83(d,J=2.1Hz,111),10.16(s,111) IR(CHCl <sub>3</sub> )3027,2940,1692,1473,1373,1227,1152,1085cm <sup>-1</sup>	powder !HNMR(CDC!3)	powder 'HNMR(CDCl <sub>3</sub> ) & 1.89-1.98(brs,1H),2.39(s,3H),3.45(s,3H),3.75(s,3H),4.77(s,2H),5.01(s,3H),5.46(s,1H),5.99(s,1H),6.45(s,1H ),6.45·6.95(m,2H),7.05(s,2H),7.24(d,J=8.1Hz,2H),7.38(d,J=8.1Hz,2H),7.50-7.56(m,2H) IR(CHCl <sub>3</sub> )3514,2937,1731,1613,1522,1484,1403,1228,1173,1082cm <sup>-1</sup>	powder HINMR(CDCl <sub>3</sub> ) & 2.31(e,3H),2.88(s,3H),3.07(s,3H),3.22(s,3II),3.51(s,3H),3.74(s,3H),5.23(s,2H),6.83(s,1H),7.11-7.18(m,2H), 7.32-7.41(m,4H),7.62-7.68(m,3H),8.03(s,1H) IR(CHCl <sub>3</sub> )3026,2939,1742,1472,1374,1227,1179,1129,1085cm <sup>-1</sup>
4	10	3.11(a,3H),3. 2,1732,1519,1	2.37(s,311),2 tz,2H),7.36-7.	2.37(s,3H),2.  2-7.44(m,6H),  39,1475,1372,	1.89-1.98(brs. 7.05(s,2H),7.2 37,1731,1613,	2.31(s,3H),2.8 62-7.68(m,3H 39,1742,1472,
3	15	40(4,311),3.66(	.93(s,311),3.19(41(m,2H),7.64	86(s,3H),3.13( 7.65-7.70(m,21	1H),2.39(s,3H 4(d,J=8.1Hz,2] 1522,1484,140	8(s,3H),3.07(s ),8.03(s,1H) 1374,1227,117
3	30	8,311),3.77(8,5	(a,:111),:3.22(a,:7.70(m,214),7.52,1085cm <sup>-1</sup>	s,3H),3.21(s,3 H) 51,1084cm <sup>-1</sup>	),3.45(s,3H),3 H),7.38(d,J=E	,3H),3.22(e,3l
ž	<del>25</del>	11D, 6. 16(6, 21D)	3H),3.55(8,3H)	3H),3.54(6,3H)	3.75(6,3H),4.77 3.1Hz,2H),7.50 1082cm <sup>-1</sup>	II),3.51(6,3II),3
2	20	,6.93(a, 1H), 7.0	,3.79(8,3H),5,	,3.79(s,3H),4.	(s,2H),5.01(s,	3.74(s,3H),5.2
:	15	77-7.49(m,5H	23(8,2H),6.86=2.1Hz,1H),1	64(s,2H),5.11	3H),5.46(s, 1F	3(6,2H),6.83(
		),7.62(d	3(s, 1H),	(s,2H),(	J),5.99(a	e, 1H), 7.
	10	d,J=3.0,8.4F	7.20(d,J=8.1 H)	3.85(s, 1H),7.	,1H),6.45(s,	11-7.18(m,2
;	5	[z,2]	Hz,	21(	H	<del>r</del>

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Table 68

1.326	powder !IINMR(CD5(OD)) & 2.33(s,3H),3.38(s,3H),3.68(s,3H),5.11(s,2H),6.44(s,1H),6.82-6.88(m,2H),6.99(d,J=1.8Hz,1H),7.13-7.19( m,3H),7.42-7.50(m,4H) IR(KBr)3411,2935,1680,1611,1520,1457,1404,1281,1230,1114cm <sup>1</sup>
1.327	powder 1HNMR(CDCl <sub>3</sub> ) & 1.72(s,3H),1.79(s,3H),3.12(s,3H),3.21(s,3H),3.27(s,3H),3.52(s,3H),3.53(s,3H),4.81(d,J=7.5Hz,2H),5.51(m, 1H),7.38-7.43(m,2H),7.45-7.50(m,2H),7.80(d,J=2.1Hz,1H),7.97(d,J=2.1Hz,1H) 1R(CHCl <sub>3</sub> )3032,2941,1543,1377,1209cm <sup>-1</sup>
1-328	m.p.205-206°C 1HNMR(CDCl <sub>3</sub> ) δ 1.75(8,3H),1.80(8,3H),3.41(8,3H),3.47(8,3H),4.66(d,J=6.6Hz,2H),5.06(8,1H),5.53(m,1H),6.33(8,1H),6.89-6. 95(m,2H),7.28-7.34(m,2H),7.38-7.40(m,1H),7.99(d,J=2.1Hz,1H),10.83(d,J=0.6Hz,1H) 1R(KBr)3476,2940,1614,1532,1371,1238,1094,1035cm <sup>-1</sup>
1-329	m.p.144-145°C HINMR(CDCl <sub>3</sub> ) & 2.83(s,3H),3.22(s,3H),3.28(s,3H),3.55(s,3H),3.79(s,3H),6.86(s,1H),7.37-7.45(m,3H),7.47-7.53(m,3H),7.65- 7.70(m,2H) IR(KBr)3434,3019,2939,1515,1480,1370,1176,1150,1081cm <sup>-1</sup>
1.330	nmorphous  1.330 ),5.23(t,J=7.2Hz,2H),7.74(a,3H),2.54(q,J=7.2Hz,2H),3.21(a,3H),3.41(a,3H),3.65(a,3H),3.77(a,3H),4.03(t,J=7.2Hz,2H  2,2H),7.71(d,J=8.7Hz,2H)  IR(CHCl <sub>3</sub> )1732,1621,1471,1375,1262,1230,1150,1061,874cm <sup>-1</sup>

Table 69

0	5	o	5	o	5	0	5	o	•
1-331	m.p.146-148°C; IINMR(CDCE) & 1.56(s, 3H), 1.80(s, 3H), 3.21(s, 3H), 3.41(s, 3H), 3.65(s, 3H), 3.77(s, 3H), 4.61(d, J=6.9Hz, 2H), 5.54(t, J=6.9Hz, 1H), 6.98(t, J=8.4Hz, 1H), 7.05(ddd, J=8.4, 2.4, 0.9Hz, 1H), 7.14(dd, J=12.0, 2.4Hz, 1H), 7.38(d, J=8.7Hz, 2H), 7.71(d, J=8.7Hz, 2Hz, 2Hz, 2Hz, 2Hz, 2Hz, 2Hz, 2Hz, 2	7 1.56(8,3H), 1. (t,J=8.4Hz, 1H)	80(8,311),3.21( ,7.05(ddd,J=8	(s,3H),3.41(s,5.4,2.4,0.9Hz,1	H),3.65(8,3H) H),7.14(dd,J=	),3.77(s,3H),4. =12.0,2.4Hz,1H	61(d,J=6.9Hz, 1),7.38(d,J=8.	,2H),5.54(t,J=7Hz,2H),7.71(	6.9Hz, 1F
1-332	m.p.170-171°C  11NMR(DMSO-da) & 1.73(a,3H),1.77(a,3H),3.31(a,3H),3.73(a,3H),4.62(d,J=7.0Hz,2H),5.48(t,J=7.0Hz,1H),6.87(d,J=8.9Hz,2  H),7.00(a,1H),7.03(ddd,J=8.7,2.3,0.9Hz,1H),7.10(dd,J=12.3,2.3Hz,1H),7.18(t,J=8.7Hz,1H),7.48(d,J=8.9Hz,2H),9.60(a,1H),1  2.9(brs,1H)  IR(KBr)3258,1687,1615,1523,1465,1373,1260,1233,1057,994,835,823cm <sup>-1</sup>	(c) & 1.73(8,311) 3(ddd,J=8.7,2.7,1615,1523,14	3,0.9Hz,1H),7.	.31(8,3H),3.73 .10(dd,J=12.3	(s,3H),4.62(d, ,2.3Hz,1H),7.	J=7.0Hz,2H),1 18(t,J=8.7Hz,	5.48(t,J=7.0Hi	z,1H),6.87(d,J 8.9Hz,2H),9.6	=8.9Hz,2
I-333	m.p.172-174°C  1HNMR(CDCl <sub>3</sub> ) δ 3.21(a,3H),3.41(a,3H),3.61(a,3H),3.77(a,3H),5,17(a,2H),6.94(a,1H),7.01-7.04(m,2H),7.13-7.18(m,1H),7.33-7.49(m,7H),7.70(d,J=9.0Hz,2H)  1.49(m,7H),7.70(d,J=9.0Hz,2H)  IR(KBr)1725,1522,1463,1346,1261,1230,1147,1058,878,756cm <sup>-1</sup>	3.21(8,3H),3.4 1,J=9.0Hz,2H) 2,1463,1346,12	11(8,3H),3.61(6	s,3H),3.77(e,3	H),5,17(s,2H)	,6.94(a, 1H), 7.0	11-7.04(m,2H)	,7.13-7.18(m,	1H),7.33-
1.334	m.p.149-151°C !!INMR(CDCD)3)	2.36(4,311),3. .4Hz,2H),7.35( 9,1472,1370,12	21(6,311),3.41( d,J=8.4Hz,2H :98,1152,1058	(8,311),3.61(8,5),7.38(d,J=8.7	311),3.77(8,3H 'Hz,2H),7.70(	),6,13(e,2H),6. 1,J=8.7Hz,2H)	93(s, 1H), 7.00	.7.03(m,2H),7	.12-7.17(

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Table 70

1-335	m.p.173·174°C IINMR(DMSO-da) & 1.64(8,3H),1.70(8,3H),2.45(q,J=6.9Hz,2H),3.31(8,3H),3.73(8,3H),4.04(t,J=6.9Hz,2H),5.22(t,J=6.9Hz,1 II),6.87(d,J=8.7Hz,2H),6.99(8,1H),7.03(ddd,J=8.7,2.1,0.9Hz,1H),7.10(dd,J=12.3,2.1Hz,1H),7.16(t,J=8.7Hz,1H),7.48(d,J=8.7 Hz,2H),9.61(8,1H),12.9(brs,1H)
	IR(KBr)3303, 1696, 1523, 1473, 1371, 1261, 1241, 1061, 1009, 839cm 1
	m.p.222-224°C 111NMR(DMSO-da) & 3.31(6,311),3.73(8,311),5.20(6,211),6.87(d,J=8.711z,211),7.00(6,111),7.03-7.07(m,114),7.13(dd,J=12.3,2.1H
1-336	z,111),7.26(t,J=8.7Hz,111),7.36-7.52(m,711),9.61(s,111),12.9(brs,111)
	m.p.205-206°C
	1HNMR(DMSO-d <sub>6</sub> ) & 2.32(9,3H),3.31(9,3H),3.72(8,3H),6.18(6,2H),6.87(d,J=8.7Hz,2H),6.90(8,1H),7.04(ddd,J=9.0,1.9,0.9Hz,
1.337	1H),7.12(dd,J=12.3,1.9Hz,1H),7.23(d,J=8.0Hz,2H),7.24(t,J=9.0Hz,1H),7.38(d,J=8.0Hz,Zh),7.46(d,J=6.7Hz,Zh),9.00(6,1H),
	12.9(brs,1H)
	IR(KIR)3303, 1696, 1623, 1464, 1261, 1241, 1096, 993, 639, 11, 79 tem
	m.p.120-121°C
	$ HNMR(CDCl_3) \delta   3.13(s,3H), 3.50(s,3H), 3.78(s,3H), 5.08(s,1H), 5.20(s,2H), 6.90(m,2H), 7.09(s,1H), 7.15-7.19(m,3H), 7.37-7.50(c,2H)$
1-338	m,5H),7.56(dd,J=10.8,2.1Hz,1H),7.64(d,J=2.4Hz,1H),9.90(8,1H)
	$1R(\mathrm{KBr})3460,2934,1694,1609,1586,1518,1467,1442,1348,1295,1273,1256,1238,1171,1123,1075,1003,960,828,807,756,700,$
	653,582,522cm <sup>-1</sup>
	m.p.266-258°C
	1HNMR(I)MSO-dc) & 3.34(s,3H),3.35(s,3H),3.72(s,3H),5.28(s,2H),6.75(d,J=8.1Hz,2H),7.05-7.11(m,3H),7.36-7.45(m,4H),7.5
1-339	3(d,J=8.1Hz,2H),7.60-7.66(m,2H),9.44(s,1H),12.84(s,1H)
	IR(KBr)3459,2940,2563,1706,1612,1522,1469,1349,1294,1258,1185,1114,1082,1063,1000,961,919,627,700,699,024cm

Table 71

1:340	m.p.165-166°C HINMR(CDCh,) & 3.14(s,3H),3.19(s,3H),3.51(s,3H),3.76(s,3H),5.21(s,2H),7.11(s,1H),7.17(d,J=8.4Hz,1H),7.29-7.50(m,9H),7. 57(dd,J=8.1,2.1Hz,1H),7.65(d,J=2.1Hz,1H),10.02(s,1H) IR(CHCh;2938,2844,1698,1613,1590,1515,1469,1372,1331,1293,1255,1174,1150,1122,1092,1005,969,873,816cm <sup>-1</sup>
1-341	m.p.195-197°C IIINMR(CDCl <sub>3</sub> ) δ 3.13(s,3H),3.18(s,3H),3.47(s,3H),5.20(s,2H),6.97(s,1H),7.17(d,J=8.7Hz,1H),7.30-7.50(m,9H),7. 58(dd,J=8.7,1.8Hz,1H),7.67(d,J=1.8Hz,1H) IR(CHCl <sub>3</sub> )2938,1740,1707,1601,1516,1472,1371,1293,1260,1174,1149,1117,1082,1060,1002,971,875cm <sup>-1</sup>
1.342	m.p.207-209°C <sup>1</sup> HNMR(CD <sub>3</sub> OD) & 3.40(s,3H),3.72(s,3H),5.21(s,2H),6.76·6.78(m,2H),6.97(s,1H),7.01-7.17(m,4H),7.31-7.52(m,6H) IR(KBr)3366,1705,1612,1591,1522,1473,1434,1375,1253,1234,1130,1084,1061,998,918,864,835,813,792,743,697,648,526c m <sup>-1</sup>
I-343	m.p.206-208°C: 1HNMR(CDCl <sub>3</sub> ) δ 3.14(s,3H),3.48(s,3H),3.72(s,3H),5.20(s,2H),5.48(br,1H),6.85-6.89(m,3H),7.15-7.19(m,3H),7.37-7.51(m,8 H),7.56(dd,J=8.4,2.4Hz,1H),7.68(d,J=2.4Hz,1H) IR(CHCl <sub>3</sub> )3320,2938,1612,1520,1474,1371,1292,1257,1172,1120,1090,1005,972,867,837,818cm <sup>-1</sup>
I-344	m.p.187-190°C !HNMR(CDCl <sub>3</sub> ) δ 2.33(s,3H),3.13(s,3H),3.50(s,3H),3.76(s,3H),5.20(s,2H),7.10(s,1H),7.15-7.19(m,3H),7.28-7.50(m,7H),7.56( dd,J=8.7,2.4Hz,1H),7.64(d,J=2.4Hz,1H),9.93(s,1H) IR(CHCl <sub>3</sub> )2930,2836,1750,1695,1588,1513,1465,1369,1329,1220,1166,1122,1091,1003,962,912,848,813cm <sup>-1</sup>

Table 72

	m.p.218-220°C
	111NMR(1)MSO-da) & 2.29(s,3H),3.36(s,3H),3.37(s,3H),3.76(s,3H),5.29(s,2H),7.11-7.16(m,3H),7.31-7.46(m,6H),7.52-7.55(m,
1.345	21I),7.62·7.68(m,2H),13.00(br,1H)
	HR(KBr)3433,2940,2600,1757,1713,1652,1611,1518,1471,1365,1295,1260,1216,1200,1171,1117,1082,1061,1022,998,975,9
	16,897,829,804,735,697,525cm <sup>-1</sup>
	m.p.206-208°C
3	
1-346	m,7H),7.57(dd,J=8.7,2.4Hz,1H),7.67(d,J=2.4Hz,1H)
	IR(CHCl <sub>3</sub> )2939,1732,1613,1699,1518,1468,1371,1290,1169,1117,1081,1064,1004,972,961,905,847,828cm <sup>-1</sup>
	m.p.201.203°C
	111NMR(1)MSO-da) & 1.72(s,311),1.76(s,311),3.34(s,311),3.63(s,311),4.51(d,J=4.2Hz,2H),5.49(t,J=4.6Hz,1H),6.66(s,1H),6.76(s,
1-347	211),6.86(s,111),7.23-7.29(m,2H),7.62-7.66(m,2H)
	IR(KBr)3431,2935,1575,1516,1462,1444,1421,1397,1375,1224,1159,1063,837cm <sup>-1</sup>
	m.p.265-266°C
9	1HNMR(I)MSO-dc) δ 2.31(8,3H),3.33(8,3H),3.62(8,3H),5.03(8,2H),6.66(8,1H),6.72-6.90(m,4H),7.18-7.28(m,3H),7.38(d,J=5.2
1-348	Hz,2H),7.64(dd,J=4.0,5.4Hz,2H)
	IR(KBr)3428,2925,1675,1516,1463,1442,1396,1374,1248,1221,1129,1087,1068cm <sup>-1</sup>
	m.p.262.263°C
9	1HNMR(I)MSO-d6) § 1.64(8,3H), 1.70(8,3H),2.43(dt,J=4.6,5.0Hz,2H),3.34(8,3H),3.62(8,3H),3.91(t,J=4.8Hz,2H),5.25(t,J=4.6
1-549	Hz,1H),6.70(s,1H),6.75(s,2H),6.87(s,1H),7.23-7.29(m,2H),7.64(dd,J=2.0,5.8Hz,2H)
	IR(KBr)3430,2934,1575,1516,1464,1443,1422,1398,1375,14246,1225,1065,1015cm <sup>-1</sup>

Table 73

1-350 H),5.	
	1HNMR(CDCl <sub>3</sub> ) δ 1.76(s,3H),1.81(d,J=0.6Hz,3H),2.54(s,3H),2.73(s,3H),3.23(s,3H),3.54(s,3H),3.77(s,3H),4.63(d,J=6.6Hz,2 H),5.49(m,1H),6.85(s,1H),7.09(d,J=8.4Hz,1H),7.30-7.40(m,4H),7.53-7.59(m,2H) 1R(CHCl <sub>3</sub> )2936,1606,1515,1475,1366,1116,1078,970,875,820cm
14N) 1-351   11z,2 11R(C)	<sup>1</sup> HNMR(CDCl <sub>3</sub> ) δ 1.68(8,3H), 1.74(d,J=0.9Hz,3H), 2.48-2.60(m,5H),2.75(8,3H),3.21(8,3H),3.54(8,3H),3.77(8,3H),4.07(t,J=6.9 Hz,2H),5.21(m,1H),6.85(8,1H),7.07(d,J=8.7Hz,1H),7.30-7.42(m,4H),7.53-7.59(m,2H)  IR(CHCl <sub>3</sub> )2928,1607,1517,1476,1367,1267,1118,1080,1014,971,892,822cm <sup>-1</sup>
1.352   m.p.201   1.11NMR   5(s,1H)   1R(KBr)	m.p.201-203°C HINMR(CDCL <sub>3</sub> ) & 3.35(s,3H),3.75(s,3H),3.76(s,3H),5.26(s,2H),6.79-6.83(m,2H),6.97(s,1H),7.01(s,1H),7.31-7.54(m,10H),9.4 5(s,1H) IR(KBr)3600-2800(br),1610,1525,1492,1462,1377,1337,1298,1208,1171,1114,1054,1031cm <sup>-1</sup>
m.p.  1-353 m,2H	m.p.141-143°C !HNMR(CDCl <sub>3</sub> ) δ 3.56(s,3H),3.78(s,3H),3.80(s,3H),4.86(s,1H),5.26(s,2H),6.88-6.92(m,2H),6.92(s,1H),6.93(s,1H),7.24-7.29( m,2H),7.36-7.41(m,1H),7.45-7.50(m,2H) IR(КВг)3600-2800(br),1612,1524,1491,1463,1448,1378,1263,1205,1177,1153,1071,1053,1026cm <sup>-1</sup>
m.p. 1-354 m,3H	m.p.115-115.5°C !HNMR(CDCl <sub>3</sub> )
I.355 m.p.1 s,1H)	m.p.139-140°C !HNMR(CDCl <sub>3</sub> ) δ 1.77(d,J=0.6Hz,3H),1.81(d,J=0.9Hz,3H),3.82(s,6H),4.64(d,J=6.9Hz,2H),5.52-5.57(m,1H),6.95(s,1H),6.97( s,1H),7.04(t,J=8.4Hz,1H),7.26-7.31(m,1H),7.37(dd,J=2.1,12.6Hz,1H),7.73-7.77(m,2H),8.26-8.31(m,2H) IR(KBr)3600-2800(br),1593,1524,1508,1486,1464,1380,1355,1278,1264,1211,1054,1029cm <sup>-1</sup>

Table 74

	foam
3	111NMR(CDC13) § 2.68(s,3H),3.13(s,3H),3.53(s,3H),3.78(s,3H),5.19(s,2H),6.83(s,1H),7.10-7.19(m,3H),7.30-7.50(m,7H),7.56-
005-1 -	7.64(m,2H)
	IR(KBr)1607,1520,1482,1365,1232,1177,1119,1082,1013cm <sup>-1</sup>
	HINMR(CDCL <sub>1</sub> ) \$\delta \) 2.39(8,3H), 3.48(8,3H), 3.75(8,3H), 5.11(8,2H), 5.67(8,1H), 5.88(8,1H), 6.46(8,1H), 6.95(d.d, J=8.7&1.8Hz,1H),
1:357	7.02.7.11(m, 111), 7.03(d, J=8.711z, 111), 7.07(d, J=1.811z, 111), 7.22(d, J=8.711z, 211), 7.34(d, J=8.711z, 211), 7.36-7.47(m, 311)1R(KBr)
	3546,3511,1611,1586,1517,1478,1405,1360,1318,1240,1109,1068,1007cm <sup>-1</sup>
	HNMR(CDCl <sub>3</sub> ) \$ 3.03(s,6H),3.48(s,3H),3.77(s,3H),5.15(s,2H),5.71(s,1H),6.73(dd,J=8.7&1.8Hz,1H),6.82(d,J=8.4Hz,2H),6.9
1-358	7(d,J=1.811z,111),6.98(dJ=8.7Hz,1H),7.11(s,1H),7.33-7.48(m,5H),7.56(d,J=8.7Hz,2H),9.92(s,1H)
	IR(KBr)3524,3447,1697,1612,1586,1525,1468,1364,1283,1257,1230,1201,1127,1103,1073,1020cm <sup>-1</sup>
	HNMR(CDCl <sub>3</sub> ) & 3.04(s,6H),3.14(s,3H),3.48(s,3H),3.76(s,3H),5.17(s,2H),6.84(d,J=8.7Hz,2H),7.06-7.17(m,3H),7.34(d,J=1.8
1.359	Hz,1H),7.35-7.50(m,6H),7.55(d,J=8.7Hz,2H),10.08(s,1H)
	IR(KBr)1698,1610,1627,1470,1357,1290,1232,1183,1115,1083,1018cm <sup>-1</sup>
	1HNMR(CDCl <sub>3</sub> ) & 2.56(8,3H),3.02(6,6H),3.54(8,3H),3.76(8,3H),5.16(6,2H),5.67(8,1H),6.80(d,J=8.4Hz,2H),6.85(8,1H),6.91(d,
1.360	d,J=8.4&2.1Hz,1H),7.01(d,J=8.4Hz,1H),7.05(d,J=2.1Hz,1H),7.30·7.47(m,5H),7.55(d,J=8.7Hz,2H)
	IR(KBr)3542,3436,1605,1530,1483,1391,1360,1287,1253,1234,1169,1074,1016cm <sup>-1</sup>
	1HNMR(CDCl3) & 1.31(d,J=6.9Hz,6H),2.67(8,3H),2.97(quint,J=6.9Hz,1H),3.54(8,3H),3.76(8,3H),5.17(8,2H),5.68(8,1H),6.86(
	$s,1H),6.92(dd,J=8.4\&2.1Hz,1H),7.02(d,J=8.4Hz,1H),7.05(d,J=2.1Hz,1H),7.31(d,J=8.1Hz,2H),7.34\cdot7.46(m,5H),7.55(d,J=8.1Hz,2H),7.34\cdot7.46(m,5H),7.55(d,J=8.1Hz,2H),7.31(d,J=8.1Hz,2H),7.34\cdot7.46(m,5H),7.31(d,J=8.1Hz,2H),7.31(d,J=$
1-361	Hz,2H)
	IR(KBr)3446,1606,1585,1522,1484,1457,1394,1356,1289,1257,1228,1172,1076,1018,1007cm-1

Table 75

55

50 290:1	<sup>1</sup> HNMR(CDCl <sub>3</sub> ) δ 1.31(d,J=6.9H 8,11I),6.97(dd,J=8.4&1.8Hz,1H), 57(d,J=7.8Hz,2H) IR(KBr)3538,3505,3465,1610,15 IINMR(CDCl <sub>3</sub> ) φ 2.66(8,3H),3.C d,J=8.7Hz,1II),7.28-7.51(m,10H) IR(KBr)3443,1604,1518,1479,13	DCl.;) & 1.31 dd,J=8.4&1 Hz,2H) 38,3505,346 DCl.;) & 2.66 H1),7.28-7.5	(d, J=6.9Hz, 3.06, 15.00, 15.0	6H),2.98(qu 03(d,J=8.4H 5,1552,1518, (8,3H),3.13(	C(l <sub>3</sub> ) & 1.31(d, J=6.9Hz, GH), 2.98(quint, J=6.9Hz, 1H), 3.46(s, 3H) dd, J=8.4&1.8Hz, 1H), 7.03(d, J=8.4Hz, 1H), 7.10(d, J=1.8Hz, 1H), 7.12(2, 15.13) ds, 3.465, 1610, 1586, 1552, 1518, 1584, 1458, 1398, 1281, 1288 (C(s, 3H), 3.06(s, 3H), 3.13(s, 3H), 3.57(s, 3H), 3.67(s, 3H) (11), 7.28-7.51(m, 10H) (13), 1604, 1518, 1479, 1364, 1237, 1177, 1153, 1118, 1078, 1014cm (13), 1604, 1518, 1479, 1364, 1237, 1177, 1153, 1118, 1078, 1014cm (14)	7),3.46(s,3H) 1=1.8Hz,1H),7 1=1.88 (1281,1288) 11),3.67(s,3H)	1 HNMR(CDCl <sub>3</sub> ) δ 1.31(d, J=6.9Hz, GH), 2.98(quint, J=6.9Hz, 1H), 3.46(s, 3H), 5.15(s, 2H), 5.67(s, 1H), 5.92(s, 1H), 6.48(s, 1H), 6.97(dd, J=8.4&L.3Hz, 1H), 7.03(d, J=8.4Hz, 1H), 7.10(d, J=1.8Hz, 1H), 7.25(s, 1H), 7.31(d, J=7.8Hz, 2H), 7.34-7.49(m, 5H), 7.31(d, J=7.8Hz, 2H), 7.34-7.49(m, 5H), 7.31(d, J=7.8Hz, 2H), 7.35(s, 3Hz, 2H), 7.31(s, 3Hz, 2Hz, 2Hz, 2Hz, 2Hz, 2Hz, 2Hz, 2Hz, 2	15(8,2H), 6.67 1(d, J=7.8Hz, 5 12, 1071, 1002 19(8,2H), 6.44(	(a, 1H), 5.92(a (H), 7.34-7.46 (cm <sup>-1</sup> (a, 1H), 6.85(a	,1H),6.48((m,5H),7.
1.364	=6.6Hz, 1H),0 1R(KBr)3432	6.42(s, 1H), 2,3285,160	6.85(s,1H),7 4,1518,1479	s,511),2.10(s, 7.09(d,J=8.4) 9,1364,1328,	Hz, 1H), 7.28-7 1291, 1269, 123	7,5.24(8,511),.49(m,611) 87,1177,11 <u>5</u> 4,	=6.6[Iz,1H], 6.42(s, 1H), 6.85(s, 1H), 7.09(d, J=8.4Hz, 1H), 7.28-7.49(m, 5H) =1.6 (Hz, 1H), 6.42(s, 1H), 6.85(s, 1H), 7.09(d, J=8.4Hz, 1H), 7.28-7.49(m, 5H) =1.6 (Hz, 1H), 6.42(s, 1H), 6.85(s, 1H), 7.09(d, J=8.4Hz, 1H), 7.28-7.49(m, 5H)	5(8,511),4.04(d	, d=0.0Fz, Zr	1), 0.49(E, J
	'HNMR(CDCl <sub>3</sub> ) d,J=7.2H2,2H),4 ,7.44-7.64(m,3H) IR(KBr)3433,160	Cl <sub>3</sub> )	(s,3H),1.67( =6.9Hz,2H) 7,1474,1365	(s,3H),1.77(s),5.25(t,J=6.9	HNMR(CDCl <sub>3</sub> ) δ 1.57(s,3H),1.67(s,3H),1.77(s,3H),1.81(s,3H),2.70(s,3H),2.96( 4,J=7.211z,211),4.64(d,J=6.9Hz,21I),5.25(t,J=6.9Hz,1II),5.49(t,J=7.21Iz,1II),6.8t 7.44-7.64(m,3H) R(KBr)3433,1600,1517,1474,1365,1339,1237,1178,1153,1118,1078,1014cm <sup>-1</sup>	H), 2.70(8, 3H), t, J=7.2Hz, 1H	<sup>1</sup> HNMR(CDCl <sub>3</sub> ) δ 1.57(s,3H),1.67(s,3H),1.77(s,3H),1.81(s,3H),2.70(s,3H),2.96(s,3H),3.24(s,3H),3.53(s,3H),3.78(s,3H),4.32(d,J=7.211z,21I),4.64(d,J=6.9Hz,21I),5.25(t,J=6.9Hz,1H),5.49(t,J=7.21Iz,1H),6.85(s,1H),7.09(d,J=8.7Hz,1H),7.31-7.41(m,3H),7.44-7.64(m,3H)  1.7.44-7.64(m,3H)  IR(KBr)3433,1600,1517,1474,1365,1339,1237,1178,1153,1118,1078,1014cm <sup>-1</sup>	4(e,3H),3.53(	s,3H),3.78(s,	3H),4.32(
	<sup>1</sup> HNMR(CDC ,5.85(s, 1H),6 IR(KBr)3437	313) & 1.76( .40(s,1H),6 .1605,158E	,s,3H), 1.82(e 3.46(s,1H),6. 5,1518,1482	s,3H),3.08(s, .89-7.00(m,2 ,1386,1323,1	<sup>1</sup> HNMR(CDCl <sub>3</sub> ) δ 1.76(s,3H), 1.82(s,3H),3.08(s,3H),348(s,3H),3.75(s,3H),4.62(d,J=7.2H),5.85(s,1H),6.40(s,1H),6.46(s,1H),6.89-7.00(m,2H),7.05(d,J=1.5Hz,1H),7.43-7.51(m,3H) (R(KB <sub>7</sub> )3437,1605,1585,1518,1482,1386,1323,1243,1152,1114,1071,1002cm <sup>-1</sup>	,3.75(8,3H),4 .5Hz,1H),7.43 .4,1071,1002c	Cl <sub>3</sub> ) δ 1.76(s,3H),1.82(s,3H),3.08(s,3H),348(s,3H),3.75(s,3H),4.62(d,J=7.2Hz,2H),5.54(t,J=7.2Hz,1H),5.70(s,1H) 3.40(s,1H),6.46(s,1H),6.89-7.00(m,2H),7.05(d,J=1.5Hz,1H),7.43-7.51(m,3H) 7.1605,1585,1518,1482,1386,1323,1243,1152,1114,1071,1002cm <sup>-1</sup>	,2H),5.54(t,J=	7.2Hz,1H),6	.70(s,1H)
	'HNMR(CDC ,1H),7.20(d,J IR(KBr)1702	Cl3) & 2.37( =8.1Hz,2H ,1607,1589	s,3H),3.21(e l),7.40(d,J=8 ),1518,1468	8,3H),3.47(8, 8.1Hz,2H),7. ,1366,1216,1	<sup>1</sup> HNMR(CDCl <sub>3</sub> ) & 2.37(s,3H),3.21(s,3H),3.47(s,3H),3.64(s,3H),3.77(s,3H),3.84(s,3H),5.1H),7.20(d,J=8.1Hz,2H),7.40(d,J=8.1Hz,2H),7.41(d,J=9.3Hz,2H),7.40(d,J=9.3Hz,2H),1.41(Klbr)1702,1607,1689,1518,1468,1356,1216,1151,1067,1039,1018cm <sup>-1</sup>	),3.77(a,3H),3 ,2H),7.70(d,J= 9,1018cm <sup>-1</sup>	Cl <sub>3</sub> ) δ 2.37(s,3H),3.21(s,3H),3.47(s,3H),3.64(s,3H),3.77(s,3H),3.84(s,3H),5.17(s,2H),6.63(s,1H),6.78(s,1H),7.10(s) J=8.1Hz,2H),7.40(d,J=8.1Hz,2H),7.41(d,J=9.3Hz,2H),7.70(d,J=9.3Hz,2H) 2.1607,1689,1518,1468,1356,1216,1161,1067,1039,1018cm <sup>-1</sup>	(s,2H),6.63(s	1H),6.78(s,1	H),7.10(s

Table 76

1:368	HINMR(CDCL <sub>3</sub> ) δ 2.37(8,3H), 3.21(8,3H), 3.48(8,6H), 3.65(8,3H), 3.73(8,3H), 3.83(8,3H), 4.32(d,J=11.4Hz,1H), 4.51(d,J=11.4Hz, HD, 5.17(8,2H), 6.93(8,1H), 6.71(8,1H), 6.78(8,1H), 7.21(d,J=8.4Hz,2H), 7.32-7.41(m,4H), 7.73(d,J=8.4Hz,2H)
	m.p. 125-127%
1-369	111NMR(CDCl3) \$ 2.60(8,311),3.52(8,311),3.73(8,311),3.84(8,311),5.20(8,211),6.83(8,111),7.00-7.48(m,1211)
	IR(KBr)3434,2943,1611,1580,1620,1498,1480,1398,1297,1268,1245,1179,1129,1079,1009cm
	m.p.137-139°C
1.370	411NMR(CDCB,) 5-3.43(8,311),3.71(8,311),3.85(8,311),5.19(8,211),5.92(6,110),6.43(8,111),7.01-7.51(m,12H)
	IR(KBr)3391,2937,1615,1583,1520,1503,1482,1464,1405,1359,1314,1292,1273,1239,1121,1108,1069,1005cm <sup>-1</sup>
	m.p.92-94°C
-	$^{\rm HNMR(CDCI3)} \delta \ 1.76(s,3H), 1.81(s,3H), 2.70(s,3H), 3.53(s,3H), 3.73(s,3H), 3.84(s,3H), 4.63(d,J=6.9Hz,2H), 5.53(m,1H), 6.84(s,3H), 2.84(s,3H), 2.84(s,3H),$
1.371	1H),7.00.7.45(m,7H)
	IR(KBr)3433,2938,1609,1581,1523,1499,1480,1401,1368,1297,1268,1240,1178,1118,1079,1021cm <sup>-1</sup>
	foam
-	$^{4}\text{HNMR}(\text{CDCI}_{3}) \ \delta  1.68(s,3H), 1.74(d,J=0.6Hz,3H), 2.50-2.59(m,2H), 2.71(s,3H), 3.53(s,3H), 3.73(s,3H), 3.84(s,3H), 4.04(t,J=7.2) \\  \frac{1}{3} \text{HNMR}(\text{CDCI}_{3}) \ \delta  1.68(s,3H), \frac{1}{3} \text{HNMR}($
2/5-1	Hz,2H),5.23(m,1H),6.83(s,1H),7.00-7.42(m,7H)
	IR(CHCh, 3)3011, 2938, 1612, 1581, 1522, 1500, 1480, 1465, 1398, 1370, 1301, 1268, 1238, 1209, 1176, 1119, 1081, 1017cm <sup>-1</sup>
	m.p.95-98°C
-	$^{1}\text{HINMR}(\text{CDCL}_3) \ \delta \ 1.76(8,3\text{H}), 1.80(8,3\text{H}), 3.43(8,3\text{H}), 3.72(8,3\text{H}), 3.85(8,3\text{H}), 4.63(4,J=6.6\text{Hz},2\text{H}), 5.56(m,1\text{H}), 5.92(8,1\text{H}), 6.43(8,3\text{H}), 4.63(4,J=6.6\text{Hz},2\text{H}), 4.63(4,J=6.6\text{Hz},2\text{H}), 6.63(4,J=6.6\text{Hz},2\text{H}), 6.63(4,J=6.6\text{Hz},2\text{Hz}), 6.63(4,J=6.6\text{Hz},2\text{Hz}), 6.63(4,J=6.6\text{Hz},2\text{Hz}), 6.63(4,J=6.6\text{Hz}), 6.63($
: :	111),7.01-7.42(m,711)
	IR(KBr)3318,2937,1612,1598,1500,1485,1464,1450,1361,1298,1275,1240,1104,1072,1011cm <sup>-1</sup>

Table 77

1-:174	m.p.69-71°C "IINMR(CDC3.) δ 1.68(s.31l), 1.74(d.J=0.611z,31l), 2.50-2.60(m,21l), 3.43(s,31l), 3.71(s,31l), 3.85(s,31l), 4.04(t.J=7.211z,21l), 5.2 3(m,11l), 5.91(s,11l), 6.43(s,11l), 7.00-7.42(m,71l) IR(KBr) 3385, 2933, 1611, 1583, 1521, 1503, 1485, 1466, 1403, 1358, 1299, 1276, 1241, 1122, 1104, 1071, 1011cm - 1
1.375	
1.376	
I-377	m.p.174.176°C; !HNMR(CDCl <sub>3</sub> ) \(\delta\) 3.21(s,3H),3.41(s,3H),3.63(s,3H),3.77(s,3H),5.30(s,2H),6.94(s,1H),7.03-7.05(m,2H),7.15-7.20(m,1H),7.25( m,1H),7.38(d,J=8.9Hz,2H),7.62(d,J=7.8Hz,1H),7.71(d,J=8.9Hz,2H),7.76(dt,J=7.8,1.5Hz,1H),8.60(m,1H)  IR(KBr)1732,1523,1474,1368,1148,1061,863,845,790cm <sup>-1</sup>
1-378	m.p.>260°C !HNMR(DMSO-da) \$\delta \text{ 3.32(8,3H),3.73(8,3H),6.28(8,2H),6.87(d,J=8.7Hz,2H),7.00(8,1H),7.04(dd,J=8.9,1.8Hz,1H),7.16(dd,J=1)}\$ 2.3,1.8Hz,1H),7.26(t,J=8.9Hz,1H),7.39(m,1H),7.57(d,J=8.7Hz,2H),7.58(d,J=7.8Hz,1H),7.89(dt,J=7.8,1.5Hz,1H),8.61(m,1H)}\$ 9.61(8,1H),12.9(brs,1H) 1R(Kls)3383,1735,1705,1610,1622,1471,1272,1226,1059,1014,838,762cm^-1
1.379	m.p.137·138°C  "HNMR(CDCl3) δ 1.77(8,3H),1.82(8,3H),3.46(8,3H),3.79(8,3H),4.64(d,J=4.6Hz,1H),5.56(t,J=4.6Hz,1H),6.92·7.20(m,6H),7.6  1(dd,J=3.6,5.8Hz,2H),9.96(Brs,1H)  IR(KBr)3434.2966.2935.2839.1702.1695.1521.1466.1378.1299.1287.1272.1240.1012.840cm <sup>-1</sup>

Table 78

m.p. 38-99C  1-380  H), 9.94(a, 11)  H(KIR)3446,2933,2845,1639,1621,1473,1463,1381,1293,1261,1131,803cm <sup>-1</sup> H), 9.94(a, 11)  H(KIR)3446,2933,2845,1639,1621,1473,1463,1381,1293,1261,1131,803cm <sup>-1</sup> m.p. 118-119C  111NMI(CIDCh) 6 1.63(a, 3H),1.74(a, 3H),2.54(dt, J=5.0.78Hz,211),3.46(a, 3H),3.78(a, 3H),4.05(t, J=7.2Hz,2H),5.24(t, J=4.4Hz,11),8.93 cm <sup>-1</sup> H(KIR)343,3.2959,2842,1701,1602,1622,1464,1379,1303,1263,1222,1132,1018cm <sup>-1</sup> H(KIR)3433,2956,2939,2842,1701,1602,1622,1464,1379,1303,1263,1222,1132,1018cm <sup>-1</sup> H(KIR)3433,2976,2937,1707,1604,1620,1472,1376,1300,1265,1226,1160,1131,1060,839cm <sup>-1</sup> m.p. 98-99C  HNMR(DMSO-da) 6 2.32(a, 3H),3.74(a, 3H),2.48.2.56(m,2H),3.77(a, 3H),3.98(t, J=4.8Hz,2H),5.26(t, J=4.2Hz,1H),6.91(a, H),7.05-7.70(m,2H)  HNMR(DMSO-da) 6 1.68(a, 3H),1.74(a, 3H),2.48.2.56(m,2H),3.57(a, 3H),3.78(a, 3H),3		
	=	n.p.98-99°C
		INMR(((:D(:)) o   Z.37(8,311),3.45(8,311),3.45(8,311),5.45(8,211),0.30-7.20(41,315),0.50(4,6-7.50(4,6-7.50),0
		IR(RBr)3446,2933,2845,1699,1521,1473,1463,1381,1293,1261,1238,1221,1131,803cm <sup>-1</sup>
		n.p.118-119°C
		$HINMR(CDCB_3) \delta - 1.69(s, 3H), 1.74(s, 3H), 2.54(dt, J=5.0, 7.8Hz, 2H), 3.45(s, 3H), 3.78(s, 3H), 4.05(t, J=7.2Hz, 2H), 5.24(t, J=4.4Hz, 1.2Hz, 2.54(t, J=4.4Hz, 2.4Hz, 1.2Hz, 2.54(t, J=4.4Hz, 2.4Hz, 2.2Hz, 2.$
		H), 6.95-7. [6(m,6H),7.61(dd,J=3.4,8.8Hz,2H),9.95(brs,1H)
		I((INIT)3433,2999,2990,2044,1104,1004,1924,193,193,193,193,193,193,193,193,193,193
		n.p.93-94°C
		·ΗΝΜΒ(DMSO-d <sub>6</sub> ) δ 1.74(8,3H),1.78(8,3H),3.32(8,3H),3.71(8,3H),4.62(d,J=7.0Hz,2H),5.48(t,J=5.8Hz,1H),6.91(8,1H),7.09-7
	<u> </u>	35(m,2H),7.64-7.71(m,2H)
	1	R(KBr)3433,2976,2937,1707,1604,1520,1472,1376,1300,1265,1226,1160,1131,1060,839cm-'
	I	n.p.98-99°C
		1HNMR(DMSO-d6) & 2.32(8,3H),3.31(8,3H),3.70(8,3H),5.13(8,2H),6.88(8,1H),7.14-7.39(m,5H),7.63-7.70(m,2H)
		IR(KBr)3433,2981,2937,1704,1603,1520,1470,1375,1301,1266,1226,1169,1061,839cm <sup>-1</sup>
<del></del>		.HNMR(DMSO-dc)
<del>- </del>		3.84(s,1H),7.05-7.36(m,5H),7.63-7.70(m,2H)
	1	II(KIbr)3433,2979,2938,1726,1603,1522,1470,1376,1301,1264,1226,1160,1132,1080,1058,840cm-1
		n.p.137-138°C
		.HNMR(CDC13) & 1.77(8,3H), 1.82(8,3H), 2.55(8,3H), 3.21(8,3H), 3.57(8,3H), 3.78(8,3H), 4.56(d, J=7.0Hz, 2H), 5.52(t, J=7.4Hz, 1H
IR(KBr)3434 2938 1607 1519 1366 1244 1174 1151 1072 871,796cm		,6.84(s,1H),7.02(d,J=8.8Hz,2H),7.34·7.40(m,4H),7.70(d,J=8.8Hz,2H)
		IR(KBr)3434,2938,1607,1519,1366,1244,1174,1151,1072,871,796cm <sup>-1</sup>

Table 79

5		Ħ	9	7	4	80
	m.p.169-170°C 1HNMR(CDC3.) & 2.48(s,3H),3.21(s,3H),3.56(s,3H),3.77(s,3H),5.08(s,2H),6.84(s,1H),7.07(d,J=5.8Hz,2H),7.19-7.39(m,4H),7. 70(d,J=6.0Hz,2H) IR(KBr)3432,3016,2935,1605,1519,1479,1368,1357,1233,1176,1151,1076,876,843,798cm <sup>-1</sup>	m.p.140-141 °C HINMR(CDCE) & 1.68(s,3H),1.75(s,3H),2.51(dt,J=4.4,4.6Hz,2H),2.55(s,3H),3.21(s,3H),3.56(s,3H),3.77(s,3H),3.97(t,J=4.8H z,2H),5.26(t,J=4.0Hz,1H),6.84(s,1H),6.99(d,J=5.8Hz,2H),7.34-7.39(m,4H),7.70(d,J=5.8Hz,2H) R(KBr)3445,2937,1608,1519,1480,1391,1361,1237,1177,1154,1077,962,871,862,800cm <sup>1</sup>	m.p.124·125℃ !HNMR(DMSO-d <sub>6</sub> )	m.p.93-94°C !IINMR(DMSO-d <sub>6</sub> )	oil !HNMR(DMSO-da) & 1.72(a,3H),1.74(a,3H),2.52(dt,J=4.8,5.0Hz,2H),3.24(a,3H),3.58(a,3H),4.06(t,J=7.2Hz,2H),5.24(t,J=4.4 Hz,1H),6.80-6.95(m,4H),7.22(d,J=8.4Hz,2H),7.46(d,J=8.2Hz,2H) IR(KBr)3340,2934,1608,1522,1486,1396,1285,1230,1175,1106,1072,996,828cm <sup>-1</sup>	·HNMR(CDCl <sub>3</sub> +CD <sub>3</sub> OD) δ 3.05(s,3H),3.48(s,3H),3.75(s,3H),5.16(s,2H),5.97(s,1H),6.02(s,1H),6.47(s,1H),6.94(d.d,J=8.4&1.8 Hz,1H),7.04(d,J=8.4Hz,1H),7.07(d,J=1.8Hz,1H),7.22-7.52(m,9H) IR(KΒ <sub>7</sub> )3548,3357,1603,1589,1520,1487,1460,1445,1410,1329,1286,1247,1153,1115,1077,1010cm <sup>-1</sup>
10	.8Hz,2H),7.19	H),3.77(6,3H)	6.4Hz,1H),6.4	),6.98(d,J=8.6	(t,J=7.2Hz,2F	17(s,1H),6.94( cm <sup>-1</sup>
15	H),7.07(d,J=5	a,3H),3.66(e,3 =6.8Hz,2H) ,862,800cm	2H),5.47(t,J=	1,J=8.6Hz,2H	58(s,3H),4.06	6.02(s,1H),6.4 15,1077,1010
20	,211),6.84(s,11),1076,876,843	55(s,311),3.21( n,411),7.70(d,J	54(d,J=6.6Hz,	(0(s,1H),6.84((	,3.24(e,3H),3. 996,828cm <sup>-1</sup>	H),5.97(s,1H), 1247,1163,11
25	7(s,3H),5.08(e	nr.p. 140-141 °C HINMR(CDCE); \$\delta \cdot 1.68(s,3H), 1.75(s,3H), 2.51(dt,J=4.4,4.6Hz,2H), 2.55(s,3H), 3.21(s,3H), 3.56(s,3H 5,2H), 5.26(t,J=4.0Hz,1H), 6.84(s,1H), 6.99(d,J=5.8Hz,2H), 7.34-7.39(m,4H), 7.70(d,J=5.8Hz,2H) R(KBr) 3445, 2937, 1608, 1519, 1480, 1391, 1361, 1351, 1237, 1177, 1154, 1077, 962, 871, 862, 800cm **	,3.65(s,3H),4.9 05,1072,996,8	5.08(6,2H),6.4 174,1119,1071	4.8,5.011z,2H) 8.211z,2H) 75,1106,1072,	s,3H),5.16(s,2  .52(m,9H) 10,1329,1286,
30	3.56(s,3H),3.7 ,1368,1357,12	2.51(dt,J=4.4 )(d,J=5.8Hz,2 ,1361,1351,12	H),3.30(s,3H) 8.2Hz,2H) 1231,1175,11	H),3.64(8,3H),	III),2.52(dt,J= 211),7.46(d,J= 1285,1230,11	8(s,3H),3.75(e Hz,1H),7.22-7 1460,1445,14
35	l),3.21(s,3H),	(1), 1.75(s, 3H), 84(s, 1H), 6.95 19, 1480, 1391	s,3H),1.75(s,3 !H),7.44(d,J≕ 23,1487,1396,	,3H),3.32(s,3l,	8,3II), I.74(8,3 2(d,J=8.4IIz,) 22,1486,1396,	3.05(s,3H),3.4 ,7.07(d,J=1.8l 39,1520,1487,
40	L.) & 2.48(s.31 211) 3016,2935,16	; la)	O-de) δ 1.73( )(d,J=8.6Hz,2 2934,1608,153	O-d <sub>6</sub> ) ô 2.32(9 1-7.46(m,411) :933.,1609,15	O-ds) & 1.72( 95(m,4H),7.2 934,1608,152	3+CD <sub>3</sub> OD) 6 ; J=8.4Hz,1H), 1357,1603,156
45	m.p.169-170°C HINMR(CDCE) & 2.48(s,3H),3.21(s,3H),3.56(s,3H),3.77(s,3H),5.08(s,2H),6.84(s,1H),7.07(d,J 70(d,J=6.0Hz,2H) IR(KBr)3432,3016,2935,1605,1519,1479,1368,1357,1233,1176,1151,1076,876,843,798cm <sup>-1</sup>	m.p.140-141% HINMR(CDCE)	m.p.124-125℃ ¹HNMR(DMSO·d¢) δ 1.73(s,3H),1.75(s,3H),3.30(s,3H),3.65(s,3H),4.54(d,J=6 .94(m,4H),7.20(d,J=8.6Hz,2H),7.44(d,J=8.2Hz,2H) IR(KBr)3411,2934,1608,1523,1487,1396,1231,1175,1105,1072,996,898cm <sup>-1</sup>	m.p.93-94°C HINMR(DMSO-d <sub>6</sub> )	oil HINMR(DMSO-d <sub>6</sub> ) & 1.72(8,3H), 1.74(8,3H), 2.52(dt,J=4.8,5.0Hz,2H),3.24(8,3H),3. Hz,1H),6.80-6.95(m,4H),7.22(d,J=8.4Hz,2H),7.46(d,J=8.2Hz,2H) IR(KBr)3340,2934,1608,1522,1486,1396,1285,1230,1175,1106,1072,996,828cm <sup>-1</sup>	<sup>1</sup> HNMR(CDCl <sub>3</sub> +CD <sub>3</sub> OD) δ 3.05(s,3H),3.48(s,3H),3.75(s,3H),5.16(s,2H),5.97(s,1H),6.02(s,1H),6.47(s,1 Hz,1H),7.04(d,J=8.4Hz,1H),7.07(d,J=1.8Hz,1H),7.22-7.52(m,9H) IR(KBr)3548,3357,1603,1589,1520,1487,1460,1445,1410,1329,1286,1247,1163,1115,1077,1010cm <sup>-1</sup>
50	986-1	1.387	1.388	1-389	0 1 068:-1	.391 F

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Table 80

. 10

1-392	HINMR(CDCl <sub>3</sub> ) & 2.37(s,3H),2.77-2.88(broad,1H),3.47(s,3H),3.64(s,3H),3.72(s,3H),3.82(s,3H),4.32(d,J=11.1&0.6Hz,1H), 4.45-4.56(broad,1H),4.92(s,1H),5.16(s,2H),6.70(d,J=9.3Hz,2H),6.88(s,1H),6.92(d,J=9.0Hz,2H),7.22(d,J=8.4Hz,2H),7.38(d,J=8.4Hz,2H),7.36(d,J=9.0Hz,2H),7.56(d,J=9.0Hz,2H),
1:393	foam 
1-394	fourn  (HNMR(CD <sub>3</sub> OD) \(\delta\) 3.38(8,3H),3.67(8,3H),4.02(dd,J=10.2,9.0Hz,1H),4.20(dd,J=10.2,3.3Hz,1H),5.11(dd,J=9.0,3.3Hz,1H),6.4  (3(s,1H),6.78(dd,J=8.4,2.1,1H),6.85(d,J=8.7Hz,2H),6.88(d,J=2.1Hz,1H),6.91(d,J=8.4Hz,1H),7.46(d,J=8.7Hz,2H),7.30~7.50(  (m,5H)  (m,5H)  (1R(Nujol)33068,1655,1612,1587,1523,1489,1456,1226,1114,1072,1014,941,825,764cm <sup>-1</sup>
1-395	foam 1HNMR(CDCl <sub>3</sub> ) δ 2.48(s,3H),2.82(s,3H),3.16(s,3H),3.22(s,3H),3.54(s,3H),3.77(s,3H),6.85(s,3H),7.34~7.38(m,2H),7.38(d,J= 8.111z,211),7.39(d,J=8.7Hz,2H),7.46(d,J=1.8Hz,1H),7.46(d,J=8.7Hz,2H),7.82(d,J=8.1Hz,2H) 1R(Nujol)1597,1514,1479,1464,1177,1152,1085,969,883,846,797,729cm <sup>-1</sup>
1.396	foam 1HNMR(CDCl <sub>3</sub> ) & 2.85(s,3H),3.14(s,3H),3.22(s,3H),3.54(s,3H),3.77(s,3H),6.85(s,1H),7.36(m,2H),7.39(d,J=8.7Hz,2H),7.45,( m,1H),7.60(in,2H),7.66(d,J=8.7Hz,2H),7.74(m,1H),7.94(m,2H) 1R(Nujol)1612,1684,1614,1479,1461,1179,1162,1085,969,949,846,797,737cm <sup>-1</sup>

Table 81

1-397	foam <sup>1</sup> HNMR(CDCl <sub>3</sub> ) & 2.73(s,3H),3.21(s,6H),3.55(s,3H),3.77(s,3H),5.20(s,2H),6.84(s,1H),7.16(brs,1H),7.22(d,J=8.1Hz,1H),7.33,( d,J=2.4Hz,1H),7.37(brs,2H),7.38(d,J=8.7Hz,2H),7.65(brs,1H),7.67(d,J=8.7Hz,2H) <sup>1</sup> R(Nujol)1608,1519,1480,1464,1176,1151,1080,972,876,846,798cm <sup>-1</sup>
1:398	foam HINMR(CDCta) δ 2.91(s,3H),3.19(s,3H),3.22(s,3H),3.54(s,3H),3.78(s,3H),5.26(s,2H),5.34(s,2H),7.04(brs,1H),7.05(s,2H),7.1 2(brs,1H),7.39(d,J=8.7Hz,2H),7.36~7.43(m,3H),7.67(d,J=8.7Hz,2H) HR(Nujol)1608,1519,1480,1463,1176,1151,1079,972,876,799cm <sup>-1</sup>
1-399	m.p.203-205 $\mathbb C$ IIINMR(DMSO-da) $\delta$ 2.87(s,3H),3.35(s,3H),3.45(s,3H),3.52(s,3H),3.78(s,3H),5.39(s,2H),7.07(s,1H),7.08(d,J=3.9Hz,1H),7.16 (d,J=3.9Hz,1H),7.31(dd,J=9.0,1.8Hz,1H),7.33(s,1H),7.42(d,J=9.0Hz,1H),7.49(d,J=8.7Hz,2H),7.74(d,J=8.7Hz,2H) (R(Nujol))1609,1520,1481,1455,1231,1080,1013,984,947,878,832,798cm $^{-1}$
1-400	foam !!INMR(CDCD) \$\partial 2.72(8,311),3.14(8,311),3.21(8,311),3.55(8,311),5.14(8,211),6.84(8,111),7.11(d,J=8.7Hz,111),7.34(dd .J=2.1,8.7Hz,111),7.34(d,J=8.4Hz,211),7.37(d,J=8.4Hz,211),7.41(d,J=2.1Hz,111),7.54(d,J=8.4Hz,211),7.68(d,J=8.4Hz,211)
1.401	foam IHNMR(CDCl <sub>3</sub> ) & 2.83(9,3H),3.14(9,3H),3.22(9,3H),3.55(9,3H),3.78(9,3H),5.26(9,2H),6.85(9,1H),7.24(d,J=8.4Hz,1H),7.38(d, J=8.4Hz,1H),7.41(dd,J=2.1,8.4Hz,1H),7.44(d,J=2.1Hz,1H),7.67(d,J=8.4Hz,2H) IR(KBr)1609,1523,1509,1481,1367,1402,1178,1152,1080,973,943,876,798cm <sup>-1</sup>

Table 82

1-402	foam HINMR(CDCH3) & 2.68(8,311),3.14(8,311),3.21(8,311),3.55(8,311),3.66(8,211),3.71(8,311),3.78(8,311),5.18(8,2H),6.84(8,1H),7.14( d,J=8.411z,111),7.32(d,J=8.711z,111),7.35(dd,J=2.1,8.711z,111),7.37(d,J=8.411z,2H),7.39(d,J=2.1Hz,1H),7.42(d,J=8.4Hz,2H),7.67(d,J=8.411z,2H) .67(d,J=8.411z,2H) HR(Rbr)1736,1610,1519,1481,1365,1177,1151,1079,876,817,798cm <sup>-1</sup>
1.403	form 11 INMR(C:DC!3) δ 2.70(n,311),3.16(n,311),3.21(n,311),3.76(n,311),3.78(n,311),5.24(n,211),6.84(n,111),7.18(d,J=8.411z,111),7.36(dd ,J=1.5,8.411z,111),7.38(d,J=8.411z,211),7.41(d,J=1.511z,111),7.46(m,211),7.54(d,J=8.111z,211),7.62(m,311),7.64(d,J=8.111z,211), 7.68(d,J=8.41z,211) 1R(KBr)1609,1519,1481,1365,1177,1151,1079,1014,876,818,797cm <sup>-1</sup>
1-404	m.p.128-130°C !HNMR(CDCl <sub>3</sub> ) & 2.75(s,3H),2.92(s,3H),3.18(t,J=6.9Hz,2H),3.21(s,3H),3.55(s,3H),3.77(s,3H),4.34(t,J=6.9Hz,2H),6.81(s,1H ),7.08(d,J=8.4Hz,1H),7.29(m,2H),7.32(br.s,3H),7.35(dd,J=2.1,8.4Hz,1H),7.38(d,J=8.4Hz,2H),7.39(d,J=2.1Hz,1H),7.67(d,J= 8.4Hz,2H) IR(KBr)1609,1520,1481,1364,1177,1151,1080,872,815,797cm <sup>-1</sup>
1.405	foam  'HNMR(CDCl <sub>3</sub> ) & 1.71(d,J=6.3Hz,3H),2.45(br.s,3H),3.20(s,3H),3.28(s,3H),3.53(s,3H),3.75(s,3H),5.43(q,J=6.3Hz,1H),6.81(s,  1H),6.90(d,J=8.4Hz,1H),7.16(dd,J=2.1,8.4Hz,1H),7.30(m,1H),7.36(d,J=2.1Hz,1H),7.37(d,J=8.4Hz,2H),7.35-7.41(m,4H),7.6  6(d,J=8.4Hz,2H)  IR(KBr)1609,1518,1480,1365,1177,1151,1078,874,818,798cm <sup>-1</sup>

Table 83

55

50	45	40	35	30	25	20	15	10	5
-406	foam 'HNMR(CD 18(t,J=6.3H	1.02(t,J=9.0H; 3.80(s,1H),6.88	2,3H),2.04(dq, (d,J=8.4Hz, 1)	J=6.3,9.0Hz,5 H),6.92(m,1H) 874.819.797e	2H),2.39(br.s.; ),7.14(dd,J=2.	3H),3.20(6,3H)	,3.30(s,3H),3. 25.7.40(m,7E	r(!s) \(\delta\) 1.02(t,J=9.0Hz,3H),2.04(dq,J=6.3,9.0Hz,2H),2.39(br.s,3H),3.20(s,3H),3.30(s,3H),3.53(s,3H),3.75(s,3H),5. z,1H),6.80(s,1H),6.88(d,J=8.4Hz,1H),6.92(m,1H),7.14(dd,J=2.4,8.4Hz,1H),7.25·7.40(m,7H),7.66(d,J=8.4Hz,2H) 9.1518,1480,1365,1177,1151,1079,874.819,797cm	3H), 5. [z, 2H]
-407	foam HINMR(CDCLa) & 2.46(s,3H),3.07(s,3H),3.20(s,3H),3.54(s,3H),3.76(s,3H),6.33(s,1H),6.82(s,1H),6.99(d,J=9.0Hz,1H),7.19(dd J=2.1,9.0Hz,1H),7.26-7.40(m,9H),7.43-7.47(m,4H),7.66(d,J=8.4Hz,2H) HR(KBr)1607,1518,1481,1364,1177,1151,1081,873,822,798cm	2.46(s,3H),3.07 .26-7.40(m,9H 1481,1364,117	7(s,3H),3.20(s),7.43·7.47(m,77,1151,1081,	,311),3.54(s,31 411),7.66(d,J= 873,822,798cr	l),3.76(6,311), -8.4112,211)	6.33(a, 111),6.8 <u>2</u>	2(8, 111), 6.99(d	,J=9.0Hz,111),7	19(dd
-408	m.p. 179·180°C  'HNMR(CDCl <sub>3</sub> ) δ 1.69(d,J=6.3Hz,3H),234(br.s,3H),2.45(s,3H),3.20(s,3H),3.27(s,3H),3.54(s,3H),3.75(s,3H),5.40(q,J=6.3Hz,1H),6.92(d,J=8.7Hz,1H),7.15(d,J=8.7Hz,1H),7.15(d,J=8.7Hz,1H),7.35(d,J=2.1Hz,1H),7.37(d,J=8.4Hz,2H),7.66(d,J=8.4Hz,2H)  T.37(d,J=8.4Hz,2H),7.66(d,J=8.4Hz,2H)  IR(KBr)1609,1518,1480,1365,1177,1161,1078,874,819,797cm <sup>-1</sup>	1.69(d,J=6.3H <sub>2</sub> 2(d,J=8.7Hz,1.),7.66(d,J=8.4†	2,3H),234(br. H),7.15(d,J=8 Hz,2H) 7,1151,1078,8	s,3II),2.45(s,5.7Hz,2II),7.16	3H),3.20(s,3H 3(dd,J=2.1,8.4	),3.27(s,3H),3.!  Hz,1H),7.27(d	54(6,3H),3.756 ,J=8.7Hz,1H	<sup>1</sup> C Cl <sub>3</sub> ) δ 1.69(d,J=6.3Hz,3H),234(br.s,3H),2.45(s,3H),3.20(s,3H),3.27(s,3H),3.54(s,3H),3.75(s,3H),5.40(q,J=6.3Hz H <sub>2</sub> ,92(d,J=8.7Hz,1H),7.15(d,J=8.7Hz,2H),7.16(dd,J=2.1,8.4Hz,1H),7.27(d,J=8.7Hz,1H),7.35(d,J=2.1Hz,1H), H <sub>2</sub> ,2H),7.66(d,J=8.4Hz,2H) H <sub>2</sub> ,2H),7.66(d,J=8.4Hz,2H)	6.3Hz z,1H),
409	m.p.243-244°C !HNMR(DMSO-d <sub>6</sub> ) & 3.30(s,3H),3.64(s,3H),5.19(s,2H),6.39(s,1H),6.64(dd,J=1.8,8.4Hz,1H),6.77(d,J=1.8Hz,1H),6.83(d,J=8.4Hz,2H),6.97(d,J=8.4Hz,1H),7.37(t,J=7.5Hz,1H),7.44(d,J=8.4Hz,2H),7.48(t,J=8.4Hz,2H),7.60(d,J=8.4Hz,2H),7.67·7.73(m,5H)  5H)  IR(KBr)3421,1610,1523,1488,1463,1403,1176,1115,1072,821cm <sup>-1</sup>	CSO-de) & 3.30(8,3H),3.64(8,3H),5.19(8,2H),6.39(8,1H),67(d,J=8.4Hz,27,1H),7.37(t,J=7.5Hz,1H),7.44(d,J=8.4Hz,27,1H),7.44(d,J=8.4Hz,27,1H),7.44(d,J=8.4Hz,27,1H),7.44(d,J=8.4Hz,27,1H2,115,1072,821cm-1,1610,1523,1488,1463,1403,1176,1115,1072,821cm-1,14103,1176,1115,1072,821cm-1,14103,1176,1115,1072,821cm-1,14103,1176,1115,1072,821cm-1,14103,141	3.64(8,3H),5.1 (t,J=7.5Hz, H	9(s,2H),6.39( 1),7.44(d,J=8.	8,1H),6.64(dd,4Hz,2H),7.48	J=1.8,8.4Hz,1 (t,J=8.4Hz,2H	H),6.77(d,J=1),7.60(d,J=8,	.8Hz,1H),6.83(c	1,J=8. 73(m,
410	foam 'HNMR(CDCl <sub>1</sub> ,) δ 3.18(t,J=6.9Hz,2H),3.45(s,3H),3.73(s,3H),4.31(t,J=6.9Hz,2H),6.44(s,1H),6.91(d,J=8.4Hz,2H),6.94(br.s,2 H),7.03(br.s,1H),7.23-7.37(m,5H),7.53(d,J=8.4Hz,2H) IR(KBr)3434,1612,1587,1523,1489,1455,1403,1250,1113,1070,1011,825,815cm <sup>-1</sup>	3.18(t,J=6.9Hz /3-7.37(m,5H), 1587,1523,148	7.2H),3.45(8,3  7.53(d,J=8.4F) 9,1455,1403,1	H),3.73(s,3H), [z,2H) 250,1113,107	4.31(t,J=6.9F.	Iz,2H),6.44(s,1	H),6.91(d,J=	3.4Hz,2H),6.94(	br.8,2

Table 84

	neon
7	111NMR(CDC33) & 1.70(d,J=6.0Hz,3H),3.44(s,3H),3.72(s,3H),5.36(q,J=6.0Hz,1H),6.42(s,1H),6.78(d,J=8.1Hz,1H),6.81(dd,J=
	1.5,8.711z,111),6.91(d,J=8.4Hz,2H),7.06(d,J=1.5Hz,1H),7.26-7.42(m,4H),7.51(d,J=8.4Hz,2H) [R(KBr)3472,1612,1587,1523,1488,1454,1403,1248,1113,1070,1011,825,cm <sup>-1</sup>
	foam
917	$ \text{HINMR}(\mathrm{CDC(l_3)} \ \delta \ \ 1.03 \\ \text{(t,J=7.2Hz,3H),1.94(m,1H),2.06(m,1H),3.43(s,3H),3.72(s,3H),5.08(dd,J=7.2,5.4Hz,1H),6.43(s,1H),6.7 \\ \text{(e,1H),6.7} \ \ 1.03 \\ \text{(t,J=7.2,5.4Hz,1H),6.43(s,1H),6.7} \\ \text{(e,1H),6.4} \ \ 1.03 \\ \text{(e,2H),6.4} \ \ \ 1.03 \\ \text{(e,2H),6.4} \ \ \ \ 1.03 \\ \text{(e,2H),6.4} \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$
211	3(d,J=8.411z,111),6.78(dd,J=1.8,8.4Hz,111),6.90(d,J=8.411z,2H),7.05(d,J=1.8Hz,1H),7.25·7.38(m,5H),7.51(d,J=8.4Hz,2H)
	IR(KBr)3434,1612,1522,1488,1454,1403,1247,1113,1070,1011,826,811cm <sup>-1</sup>
	foam
	1HNMR(CDCl3) 8 3.44(s,3H),3.73(s,3H),6.25(s,1H),6.43(s,1H),7.26(m,2H),6.90(d,J=8.4Hz,2H),7.08(d,J=2.1Hz,1H),7.29.7.4
21 1-1	3(m,10H),7.51(d,J=8.4Hz,2H)
	IR(KBr)3432,1611,1523,1489,1454,1402,1226,1110,1069,1011,825cm-1
	foam
	$^{1}$ HNMR(CDCl <sub>3</sub> ) $\delta$ 1.69(d,J=6.3Hz,3H),235(a,3H),3.44(a,3H),3.72(a,3H),5.33(q,J=6.3Hz,1H),6.42(a,1H),6.80(br.s,2H),6.90(
1-414	d,J=8.4Hz,2H),7.05(br.s,1H),7.18(d,J=7.8Hz,2H),7.29(d,J=7.8Hz,2H),7.51(d,J=8.4Hz,2H)
	IR(KBr)3433, 1612, 1522, 1488, 1459, 1403, 1248, 1113, 1069, 1011, 817cm-1
	m.p.164-167°C
1 415	1HNMR(CDCl3) & 3.79(8,3H),3.80(8,3H),4.8 i (brs, 1H),5.29(8,2H),6.88·6.94(m,4H),7.16(d,J=8.7Hz,1H),7.32·7.52(m,7H),7.73
015-1	(dd,J=2,1,8.7Hz,1H),8.10(d,J=2.1Hz,1H)
	IR(KBr)3513,2930,1618,1529,1497,1448,1387,1354,1296,1257,1211,1168,1091,1064,1024cm <sup>-1</sup>

Table 85

55

50	45	40	<b>35</b> .	30	25	20	15	10	5
1.16	m.p. 155-159°C 1HNMR(CDCl.) & 3.20(s,3H),3.39(s,3H) dd,J=2.1,8.4Hz,1H),8.26(d,J=2.1Hz,1H) R(KBr)3433,2944,1539,1519,1487,1358	59°C. DCE) & 3.20(s.3H),3.39(s.3H),3.82(s.3H),3.83(s,3H),6.95(s,1H),6.96. AHz,1H),8.26(d,J=2.1Hz,1H) 33,2944,1539,1519,1487,1358,1216,1176,1150,1086,1057,1031cm	39(s,311),3.82(s 11tz,111) 487,1358,1216	4,3H),3.83(8,3	H), 6.95(a, 1H)	6.96(s, 1H), 7.3	4-7.38(m,211),	.9°C. DCh.) & 3.20(s,3H),3.39(s,3H),3.82(s,3H),3.83(s,3H),6.95(s,1H),6.96(s,1H),7.34·7.38(m,2H),7.58·7.64(m,3H),7.87( AHz,1H),8.26(d,J=2.1Hz,1H) 33,2944,1539,1519,1487,1358,1216,1176,1150,1086,1057,1031cm	7.87(
1.417	m.p.124-126°C HINMR(CDCh.) & 3.19(8,3H),3.80(8,6H),5.30(8,2H 2H),7.73(dd,4=2.1,9.0Hz,1H),8.10(d,4=2.1Hz,1H) IR(KBr)3433,2937,1619,1531,1491,1465,1450,13	26°C: DCl <sub>3</sub> ) δ 3.19(8,3H),3.80(8,6H),6.30(8,2H),6.93(8,1H),6.94(8,1H),7.18(d,J=9.0Hz,1H),7.32-7.4 d,J=2.1,9.0Hz,1H),8.10(d,J=2.4Hz,1H) 33,2937,1619,1531,1491,1465,1450,1358,1290,1256,1211,1176,1150,1088,1062,1033cm <sup>-1</sup>	80(8,6H),5.30(9 10(d,J=2,1Hz,1 491,1465,1450	1,2H),6.93(8,1 HI) 1358,1290,12	II),6.94(s, III), 56,1211,1176	7.18(d,J=9.011 01.8801,0311,	[z,111),7.32-7.6	.6°C. DCh) & 3.19(a,3H),3.80(a,6H),6.30(a,2H),6.93(a,1H),6.94(a,1H),7.18(d,J=9.0Hz,1H),7.32-7.62(m,7H),7.59-7.64(m, d,J=2.1,9.0Hz,1H),8.10(d,J=2.1Hz,1H) 33,2937,1619,1531,1491,1465,1450,1358,1290,1256,1211,1176,1150,1088,1062,1033cm <sup>-1</sup>	14(m,
1-418	m.p.151-153°C !HNMR(CDCL;;)	3,2930,1610,1	781(s,3H),3.78 523,1489,1467	4(s,3H),5.14(s	1,2H),6.90-7.0	)(m,5H),7.31-7	7.50(m,7H),7.6	30-7.65(m,2H)	
1.419	m.p.198-200°C !HNMR(CDCls)	i 3.77(s,6H),5. 7,1611,1592,1	13(s,2H),6.86-7 525,1492,1462	00(m,7H),7 1444,1384,13	34-7.50(m,7H)	1209,1178,11	49,1110,1058,	1037,1006cm <sup>-1</sup>	
1.420	m.p.168-171°C HNMR(CDCl <sub>3</sub> ) δ 2.99(s,3H),3.19(s,3H),3.80(s,3H),3.81(s,3H),5.16(s,2H),6.83(brs,1H),6.92(s,1H),6.96(s,1H),7.06(d,J=8.7H z,1H),7.32-7.46(m,8H),7.60-7.64(m,2H),7.81(d,J=2.1Hz,1H) IR(KBr)3403,3327,1611,1592,1525,1492,1462,1444,1384,1318,1273,1243,1209,1178,1149,1110,1058,1037,1006cm <sup>-1</sup>	2.99(s,3H),3. 1,8H),7.60-7.64 7,1611,1592,1	.19(s,3H),3.80( l(m,2H),7.81(d 525,1492,1462	s,3H),3.81(s,3 ,J=2.1Hz,1H) ,1444,1384,13	H),5.16(s,2H)	6.83(bre, 1H), (	5.92(s,1H),6.9 49,1110,1058,	6(s,1H),7.06(d,J= 1037,1006cm <sup>-1</sup>	8.7Н
1.421	m.p.168-171°C <sup>1</sup> HNMR(CDCl <sub>3</sub> ) ô 3.19(s,3H),3.80(s,3H),3.81(s,3H),5.23(s,2H),6.93(s,1H),6.97(s,1H),7.07(d,J=8.7Hz,1H),7.33-7.45(m,8H),7. 61-7.65(m,2H),8.58(d,J=2.4Hz,1H),8.66(brs,1H) <sup>1</sup> IR(KBr)3401,1723,1613,1595,1549,1518,1486,1385,1365,1330,1299,1256,1212,1151,1119,1060,1037,1017cm <sup>-1</sup>	11°C DCl <sub>3</sub> ) & 3.19(e,3H),3.80(e,3H),3.81(e,3H),5.23(e,2H),6.93(e,1H),6.97(e,1H),7.07(d,J=8.7Hz,1H),7.33-7.4 2H),8.58(d,J=2.4Hz,1H),8.66(brs,1H) 01,1723,1613,1595,1549,1518,1486,1385,1365,1330,1299,1256,1212,1151,1119,1060,1037,1017cm <sup>-1</sup>	50(s,3H),3.81(e IH),8.66(brs,1F 549,1518,1486	,3H),5.23(a,2l H) 1386,1366,13	H),6.93(s,1H),	6.97(a,1H),7.0°	7(d,J=8.7Hz,1 19,1060,1037,	H),7.33-7.45(m,8 1017cm <sup>-1</sup>	Н),7.

Table 86

m.p.159-160°C 11NMR(CDC!a) δ 1.69(s,3H),1.74,(s,3H 1-422 H),5.24(t,J=7.2Hz,1H),6.85(s,1H),7.07(c) 8(d,J=8.7Hz,2H) 11R(KBr)1515,1481,1359,1325,1175,114(c) 1180-182°C 11NMR(CDC!a) δ 1.76(s,3H),1.81,(s,3H) 11-423 H),6.85(s,1H),7.09(d,J=8.7Hz,1H),7.39(c) 11R(KBr)1514,1479,1360,1241,1174,1133(c) 11NMR(CDC!a) δ 2.64(s,3H),3.22(s,3H) 11-424 54(dd,J=8.6,2.1Hz,1H),7.66-7.70(m,3H) 11R(KBr)1517,1482,1367,1327,1178,1156(c) 11NMR(CDC!a) δ 2.37(s,3H),2.63(s,3H) 11-425 J=8.04z,2H),7.34(d,J=8.04z,2H),7.38(d,J=8.04z,2H),7.34(d,J=8.04z,2H),7.38(s,3H) 11-426 7.2Hz,1H),6.02(s,1H),6.45(s,1H),6.92(d,d,J=2.04z,1H)	
	111NMR(CDCB) & 1.69(8,3H), 1.74, (8,3H), 2.55(q,J=7.2Hz,2H), 2.73(8,3H), 3.22(8,3H), 3.55(8,3H), 3.77(8,3H), 4.06(t,J=7.2Hz,2
	H),5.24(t,J=7.2Hz,1H),6.85(s,1H),7.07(d,J=8.6Hz,1H),7.39(d,J=8.7Hz,2H),7.55(dd,J=8.6,2.1Hz,1H),7.63(d,J=2.1Hz,1H),7.6
	IR(KBr)1515,1481,1359,1325,1175,1140,1079,870,799cm <sup>-1</sup>
	$HINMR(CDCE_3) \circ -1.76(8,3H), 1.81, (8,3H), 2.71 (8,3H), 3.22 (8,3H), 3.55 (8,3H), 3.78 (8,3H), 4.06 (4,J=6.3Hz,2H), 5.50 (t,J=6.3Hz,1)$
	H),7.09(d,J=8.7Hz,1H),7.39(d,J=8.7Hz,2H),7.55(dd,J=8.7,2.0Hz,1H),7.64(d,J=2.0Hz,1H),7.68(d,J=8.7Hz,2H)
	14,1479,1360,1241,1174,1132,1078,866,800cm <sup>-1</sup>
	111NMR(CDCB) & 2.64(a,311),3.22(a,311),3.55(a,311),3.78(a,311),5.26(a,211),6.85(a,1H),7.14(d,J=8.6Hz,1H),7.33-7,48(m,7H),7.
	),7.66-7.70(m,3H)
	17,1482,1367,1327,1178,1150,1135,1081,878,797cm <sup>-1</sup>
	IIINMR(CDCI);) δ 2.37(8,311), 2.63(8,3H), 3.21(8,3H), 3.55(8,3H), 3.78(8,3H), 5.21(8,2H), 6.84(8,1H), 7.13(d,J=8.7Hz,1H), 7.20(d,
IR(KBr)1517,1481,1366,132 amorphous 'HNMR(CDCl <sub>3</sub> ) & 1.68(e,3H 1.426 7.2Hz,1H),6.02(e,1H),6.45(e, (d,J=2.0Hz,1H)	1),7.34(d,J=8.0Hz,2H),7.38(d,J=9.0Hz,2H),7.53(dd,J=8.7,1.8Hz,1H),7.66(d,J=1.8Hz,1H),7.68(d,J=9.0Hz,2H)
amorphous   HNMR(CDCl <sub>3</sub> ) & 1.68(s,3H   1.426   7.2Hz,1H),6.02(s,1H),6.45(s   (d,J=2.0Hz,1H)	17,1481,1366,1326,1255,1177,1151,1082,871,798cm <sup>-1</sup>
1.426 7.2Hz,1H),6.02(s,1H),6.45(s, (d,J=2.0Hz,1H)	
1.426 7.2Hz,1H),6.02(s,1H),6.45(s,	$ HNMR(CDC _3) \delta  _{1.68(s,3H),1.73(s,3H),2.54(q,J=7.2Hz,2H),3.44(s,3H),3.75(s,3H),4.05(t,J=7.2Hz,2H),.5.07(s,1H),5.24(t,J=1.2Hz,2H),1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.$
(d,J=2.0Hz,1H)	1-426 7.2Hz,1H),6.02(8,1H),6.45(8,1H),6.92(d,J=8.6Hz,2H),7.41(d,J=8.6Hz,1H),7.53(d,J=8.6Hz,2H),7.59(dd,J=8.6,2.0Hz,1H),7.63
IR(CHCl <sub>3</sub> )3595,3506,1614,1	1595,3506,1614,1623,1489,1326,1281,1258,1122,1079,1067cm <sup>-1</sup>

Table 87

	m.p.180-182°C
1-427	
	), b. 46(8, 111), b. 33(0, J=8,3112, Z1), f. 10(0, J=8,3112, 111), f. 33(0, J=8,3112, I11), f. 138(0, J=8,3112, I11), f. 11(0, J=8,312, J=8,3112, I11), f. 11(0, J=8,312, J=8,312, J=8,3112, I11), f. 11(0, J=8,312, J=8,312, J=8,3112, J=8,312, J=8,
	m.p.133-135 C
-	111NMR(CDC13.) \$\delta \text{ 3.44(8,311),3.75(8,311),4.87(8,111),5.23(8,211),6.03(8,111),6.46(8,111),6.93(4,\delta \text{8.6Hz,211),7.11(d,\delta \text{8.4Hz,1}}
-128	H),7.32-7.49(m,511),7.53(d,J=8.6Hz,2H),7.60(dd,J=8.4,2.1Hz,1H),7.75(d,J=2.1Hz,1H), IR(KBr)3397,1612,1523,1489,1400,1321,1257,1132,1084,1056,1002,832cm <sup>-1</sup>
	m.p.174-176℃
•	$^{1}\text{HNMR(CDCI3)} \delta - 2.37(s, 3H), 3.44(s, 3H), 3.75(s, 3H), 4.88(s, 1H), 5.18(s, 2H), 6.02(s, 1H), 6.45(s, 1H), 6.93(d, J=8.6Hz, 2H), 7.11(d, J=1.00)$
1.429	J=8.4Hz,1H),7.21(d,J=8.1Hz,2H),7.36(d,J=8.1Hz,2H),7.53(d,J=8.6Hz,2H),7.59(dd,J=8.4,2.1Hz,1H),7.74(d,J=2.1Hz,1H),
	IR(KBr)3481,3376,1616,1520,1491,1327,1260,1119,1081,1004,827cm <sup>-1</sup>
	1HNMR(CDCI3) & 2.37(6,3H),2.54(s,3H),2.68(s,3H),3.12(s,3H),3.54(s,3H),3.77(s,3H),5.14(s,2H),6.85(s,1H),7.12-7.24(m,3H),
1.430	7.30-7.44(m,6H),7.53-7.59(m,2H)
	IR(CHCt <sub>1</sub> )1608,1517,1476,1367,1117,1080,1013,970,876cm <sup>-1</sup>
	m.p.164.168°C
	$^{\rm i} {\rm HNMR}({\rm CDCI}_{\rm i}) \ \delta \ 1.76(s,3H), 1.82(s,3H), 2.54(s,3H), 3.47(s,3H), 3.76(s,3H), 4.62(d,J=6.9Hz,2H), 5.53(m,1H), 5.69(s,1H), 5.89(s,1H), 5.89(s$
1-431	1H),6.46(s,1H),6.92-7.08(m,3H),7.30-7.38(m,2H),7.55-7.62(m,2H)
	IR(CHCh)3518,2968,1584,1516,1483,1460,1414,1388,1310,1289,1243,1114,1069,1011,936,818cm <sup>-1</sup>
	m.p.179-181℃
1 130	1HNMR(CDCl <sub>3</sub> ) δ 2.39(8,3H), 2.54(8,3H), 3.46(8,3H), 3.74(8,3H), 5.10(8,2H), 5.67(8,1H), 5.89(8,1H), 6.46(8,1H), 6.81(dd, J=2.1,8.
1-432	4Hz,1H),7.03(d,J=8.4Hz,1H),7.08(d,J=2.1Hz,1H),7.20·7.26(m,2H),7.31·7.37(m,4H),7.55·7.61(m,2H)  1R/CHCl <sub>3</sub> 3524 2930 1585 1517 1483 1460 1414 1389 1310 1289 1245 1114 1090 1070 1009 937 818cm <sup>-1</sup>

Table 88

	m.p.111.112°C
	$HINMR(CDCL3) \delta - 1.76(d, J = 0.611z, 311), 1.81(d, J = 0.911z, 311), 2.69(s, 311), 3.52(s, 311), 3.78(s, 311), 4.63(t, J = 6.6Hz, 211), 5.53(m, 1H)$
:::-:	,6.84(s,111),7.02-7.25(m,511),7.56-7.65(m,211)
	IR(CHCh, 2932, 1607, 1520, 1481, 1368, 1266, 1080, 1012, 961, 907, 836, 812cm
	m.p.97-101°C
	$\text{i}_{11111111111111111111111111111111111$
::-:	7(s, 111),5.88(s, 111),6.46(s, 111),6.92-6.97(m,211),7.05(m,111),7.30-7.38(m,211),7.55-7.62(m,211)
•	IR(CHCh)3518,2928,1584,1517,1483,1414,1388,1290,1246,1114,1090,1070,1011,937,907,818cm · 1
	m.p.127-129°C
	111NMR(CDCl.3) \$\delta\$ 1.68(s, 3H), 1.74(d, J=1.2Hz, 3H), 2.50-2.60(m, 2H), 2.71(s, 3H), 3.52(s, 3H), 3.77(s, 3H), 4.04(t, J=7.2Hz, 2H), 5.2
1.435	3(m,1H),6.83(s,1H),7.00-7.21(m,5H),7.57-7.64(m,2H)
	IR(CHCI <sub>1</sub> )2930,1607,1520,1481,1368,1266,1080,1012,960,836,812cm <sup>-1</sup>
	m.p.159-161°C
9	1HNMR(CDCL3) § 2.36(8,3H),2.57(8,3H),3.52(8,3H),3.77(8,3H),5.16(8,2H),6.83(8,1H),7.05-7.24(m,7H),7.31-7.37(m,2H),7.56-
1.430	7.65(m,211)
	IR(CHCl <sub>3</sub> )1520,1481,1368,1267,1131,1080,1012,960,836cm <sup>-1</sup>
	m.p.120-124°C
to	$^{1}$ HNMR(CDCl <sub>3</sub> ) $\delta$ 1.76(d,J=0.6Hz,3H),1.81(d,J=0.6Hz,3H),3.43(s,3H),3.67(s,3H),4.63(d,J=6.6Hz,2H),5.56(m,1H),5.96(s,1H)
/ C.F1	),6.44(s,111),7.00-7.24(m,5H),7.57-7.66(m,2H)
	IR(CHCl <sub>3</sub> )3522,2930,1586,1518,1484,1415,1390,1311,1290,1248,1115,1090,1071,1012,938,818cm

Table 89

1-438	
	10(C11C3)2430, 2552, 1015, 1520, 1488, 1400, 1531, 1513, 1267, 1113, 1069, 1010, 934, 825cm
661-1	m.p.76.5-77.5°C HINMIR(CDCl <sub>3</sub> ) & 1.68(s,311), 1.74(d,J=0.9Hz,311), 2.49-2.60(m,211), 3.43(s,311), 3.75(s,311), 4.05(t,J=7.2Hz,2H), 5.23(m,1H), 5.9 6(s,111), 6.44(s,111), 6.99-7.28(m,511), 7.57-7.66(m,211)
	IR(CHCl <sub>3</sub> )3498,2930,1613,1521,1489,1391,1310,1267,1113,1070,1011,934,825cm <sup>-1</sup>
:	m.p.174-176°C HINMR(CDCLs) & 2.80(s,311),3.46(s,311),3.76(s,311),5.16(s,211),5.71(s,111),5.88(s,111),6.47(s,111),6.95(dd,J=1.8.8.411z,111),7.
1-440	04(d,J=8.4Hz,1H),7.08(d,J=1.8Hz,1H),7.34-7.49(m,5H),7.72-7.85(m,4H) IR(CHCls)3518,1587,1516,1483,1459,1415,1387,1290,1114,1070,1041,1011,936,821cm <sup>-1</sup>
	m.p.199-202°C 111NMRd6-1)MS()) & 3.28(s.311) 3.34(s.311) 3.67(s.311) 5.14(s.911) 6.56(d.111) 6.66(d.11-9.1.9.1.9.11) 6.76(d.11-9.11)
-441	6.97(d,J=8.4Hz,HI),7.30-7.56(m,5H),7.86-7.93(m,2H),7.98-8.04(m,2H),8.65-9.02(brs,2H) IR(KBr)3487,3413,3004,1597,1518,1500,1482,1456,1360,1310,1281,1231,1146,1118,1090,1068,1016,1004,961cm <sup>-1</sup>
	m.p.80-84°C 'HNMR(CDCla) & 1.15(t.1=7.2Hz.3H) 3.60(a.1=7.2Hz.2H) 3.75(s.3H) 6.03(s.1H) 6.15(s.9H) 6.60(s.1H) 6.08(s.1H)
-442	),6.88-6.94(m,2H),6.96(dd,J=2.1,8.1Hz,1H),7.02(d,J=8.1Hz,1H),7.10(d,J=2.1Hz,1H),7.34-7.49(m,5H),7.61-7.69(m,2H) IR(CHCl <sub>3</sub> )3528,1612,1521,1488,1454,1412,1383,1286,1246,1113,1069,1023,886,825cm <sup>-1</sup>

Table 90

1-443	m.p.168-169°C HINMR(CDCL3) & 1.14(t,J=6.9Hz,3H),2.66(s,3H),3.13(s,3H),3.20(s,3H),3.72(q,J=6.9Hz,2H),3.78(s,3H),5.19(s,2H),6.84(s,1H),7.15(d,J=8.4Hz,1H),7.31-7.49(m,9H),7.66-7.73(m,5H) ),7.15(d,J=8.4Hz,1H),7.31-7.49(m,9H),7.66-7.73(m,5H) HR(CHCL3)1517,1479,1369,1148,1117,1082,969,873cm <sup>-1</sup>
1-444	m.p.192-194°C чними(сисия) б з.13(в,311),з.44(в,311),з.63(в,311),в.14(вг,111),б.19(в,211),б.81-6.84(m,211),б.94(в,111),7.14(d,J= 8.411z,111),7.22-7.25(m,211),7.37-7.50(m,511),7.57(dd,J=8.7,2.111z,111),7.67(d,J=2.111z,111) и(СПСв)3595,3441,1730,1613,1522,1472,1371,1291,1258,1172,1164,1003,972,961,904,838cm <sup>-1</sup>
1-445	m.p.179-180°C IINMR(CDCh) δ 1.77(8,3H),1.82(8,3H),2.31(8,3H),3.24(8,3H),3.45(8,3H),3.58(8,3H),3.76(8,3H),4.64(d,J=6.9Hz,2H),6.95(8, 1H),7.06-7.13(m,3H),7.35-7.38(m,2H),7.57(dd,J=8.4,2.4Hz,1H),7.64(d,J=2.4Hz,1H) 1R(CHCl <sub>3</sub> )2938,1732,1614,1599,1518,1470,1445,1370,1345,1290,1228,1200,1169,1116,1081,1003,973,905,846,829cm <sup>-1</sup>
1-446	m.p.137-138°C HINMR(CDC13) & 3.13(8,311),3.46(8,311),3.59(8,311),3.77(8,311),3.88(8,311),4.23(8,2H),5.19(8,2H),6.96(8,1H),7.16(d,J=8.7Hz, 1H),7.35-7.50(m,9H),7.60(dd,J=8.7,2.4Hz,1H),7.67(d,J=2.4Hz,1H) IR(CHCl3)2954,1750,1734,1614,1516,1471,1387,1372,1345,1291,1258,1173,1147,1118,1081,1064,1004,877cm <sup>-1</sup>
1-447	m.p.184-185°C 1HNMR(CDCl <sub>3</sub> ) ô 3.44(e,3H),3.60(e,3H),3.74(e,3H),4.70(br,2H),5.17(e,2H),6.95-7.02(m,4H),7.17(dd,J=8.4,2.1Hz,1H),7.25(e, 1H),7.31-7.34(d,J=8.7Hz,2H),7.38-7.47(m,5H) 1R(CHCl <sub>3</sub> )3541,2937,1776,1733,1608,1519,1474,1442,1344,1291,1157,1130,1086,1063,1002,900,862,835cm <sup>-1</sup>

Table 91

. 

1-148	m.p.176-178°C; HINMR(CDCE) & 3.12(s.3H),3.44(s.3H),3.60(s.3H),3.76(s,3H),3.83(s,3H),4.66(s,2H),5.19(s,2H),6.91-6.96(m,3H),7.14(d,J=8.4Hz,1H),7.28-7.49(m,7H),7.57(dd,J=8.7,2.4Hz,1H),7.67(d,J=2.4Hz,1H) HRCH(CE)32953,2939,1758,1732,1610,1519,1471,1444,1371,1345,1291,1177,1117,1085,1064,1002,973,961,904,837cm <sup>-1</sup>
1-449	m.p.124-126°C <sup>1</sup> HINMR(CDCh <sub>3</sub> ) δ 1.69(s, 3H), 1.74(d, J=0.9Hz, 3H), 2.31(s, 3H), 2.53-2.60(m, 2H), 3.23(s, 3H), 3.44(s, 3H), 3.58(s, 3H), 3.76(s, 3H), 4. <sup>1</sup> 09(t, J=6.6Hz, 2H), 5.22(m, 1H), 6.95(s, 1H), 7.07(d, J=8.4Hz, 1H), 7.10-7.13(m, 2H), 7.34-7.37(m, 2H), 7.57(dd, J=9.0, 2.4Hz, 1H), 7.6 <sup>4</sup> (d, J=2.4Hz, 1H) <sup>4</sup> (d, J=2.4Hz, 1H) <sup>4</sup> (d, J=2.4Hz, 1H)
1.450	m.p.160-161°C HINMR(CI)Cl <sub>3</sub> ) & 1.69(s,3H),1.74(d,J=0.9,3H),2.53-2.60(m,2H),3.23(s,3H),3.44(s,3H),3.62(s,3H),3.76(s,3H),4.08(d,J=6.6Hz,2H),4.91(br,1H),5.20-5.25(m,1H),6.83-6.86(m,2H),6.94(s,1H),7.06(d,J=8.7Hz,2H),7.23-7.26(m,2H),7.57(dd,J=8.7,2.4Hz,1H),7.64(d,J=2.4Hz,1H) ),7.64(d,J=2.4Hz,1H) HR(CIICl <sub>3</sub> )3595,3448,2937,1730,1613,1522,1469,1445,1370,1345,1292,1260,1172,1117,1081,1064,1003,973,864,837cm <sup>-1</sup>
I-451	m.p.182-184°C <sup>1</sup> HNMR(CDCl <sub>3</sub> ) δ 1.70(d,J=0.6Hz,3H),1.81(d,J=0.9Hz,3H),3.24(s,3H),3.45(s,3H),3.63(s,3H),3.75(s,3H),4.64(d,J=6.6Hz,2H), <sup>2</sup> 5.48-5.54(m,1H),5.76(br,1H),6.78-6.82(m,2H),6.95(s,1H),7.08(d,J=8.7Hz,1H),7.19-7.24(m,2H),7.56(dd,J=8.7,2.4Hz,1H),7.6 <sup>4</sup> (d,J=2.4Hz,1H) <sup>4</sup> (d,J=2.4Hz,1H) <sup>1</sup> (CHCl <sub>3</sub> )3595,3445,2939,1730,1613,1522,1471,1445,1369,1345,1291,1257,1172,1116,1081,1064,1002,973,904,838cm <sup>-1</sup>
1-452	m.p.250-253°C(dec.)  1HNMR(CD <sub>3</sub> OD) δ 3.41(8,3H),3.71(8,3H),4.58(8,2H),5.21(8,2H),6.29-6.95(m,3H),7.02-7.03(m,2H),7.17(8,1H),7.26-7.41(m,5 H),7.49-7.52(m,2H)  1H),7.49-7.52(m,2H)  1R(KBr)3424,2933,2553,1709,1608,1519,1467,1383,1333,1291,1229,1129,1084,1060,1001,915,861,841,727,697cm <sup>-1</sup>

Table 92

1-453 5(br, 11D,5.23() 1R(CHCl3)359 1-454 m.p.166-167°C 1HNMR(CDC) 1-454 m.21D,6.93-6.3 1R(KBr)3447,2 1-455 m.21D,6.98-7.1 1R(KBr)3411,2 1R(KBr)3411,2 1R(KBr)3411,2 1R(KBr)3411,2	HINMR(CDC!h) & 1.69(s.31l), 1.75(d,J=1.21lz,31l), 2.51-2.58(m,21l), 3.43(s,31l), 3.62(s,31l), 3.75(s,31l), 4.08(t,J=6.91lz,21l), 4.8 5(br, 11l), 5.23(m,11l), 5.23(m,11l), 6.82-6.85(m,21l), 6.90-6.94(m,21l), 7.16(dd,J=8.4,2.11z,11l), 7.23-7.26(m,31l) (m,21l), 6.23-7.26(m,31l) (m,21l), 6.23-7.26(m,31l), 6.77(s,31l), 1.82(s,31l), 3.48(s,31l), 3.75(s,31l), 4.64(d,J=6.6Hz,21l), 5.51-5.55(m,11l), 5.75(br,11l), 6.77-6.80(m,21l), 7.17(s,31l), 7.17(s,31l), 7.23-7.28(m,31l) (m,21l), 6.93-6.96(m,21l), 7.17(s,31l), 7.23-7.28(m,31l)
	), 5.23(m, 1H), 5.71(br, 1H), 6.82-6.85(m, 2H), 6.90-6.94(m, 2H), 7.16(dd, J=8.4, 2.1Hz, 1H), 7.23-7.26(m, 3H)  [3] 35596, 3541, 2936, 1730, 1612, 1590, 1522, 1470, 1395, 1345, 1290, 1258, 1173, 1130, 1081, 1063, 1004, 861, 836cm <sup>-1</sup> [3] 167 Clarante (CDCla) & 1.77(s, 3H), 1.82(s, 3H), 3.48(s, 3H), 3.75(s, 3H), 4.64(d, J=6.6Hz, 2H), 5.51-5.55(m, 1H), 5.75(br, 1H), 6.77-6.80(s, 3.447, 9037, 1500, 1520, 1520, 1932, 19
	13/3596,3541,2936,1730,1612,1590,1522,1470,1395,1345,1290,1258,1173,1130,1081,1063,1004,861,836cm <sup>1</sup> 1-167°C (CDCl3) & 1.77(8,3H),1.82(8,3H),3.48(8,3H),3.75(8,3H),4.64(d,J=6.6Hz,2H),5.51-5.55(m,1H),5.75(br,1H),6.77-6.80( 1.93-6.96(m,2H),7.17(8d,J=8.1,2.1Hz,1H),7.23-7.28(m,3H)
	1.167°C (CDCB) & 1.77(s, 3H), 1.82(s, 3H), 3.48(s, 3H), 3.75(s, 3H), 4.64(d, J=6.6Hz, 2H), 5.51-5.55(m, 1H), 5.75(br, 1H), 6.77-6.80( .93-6.96(m, 2H), 7.17(dd, J=8.1, 2.11Hz, 1H), 7.23-7.28(m, 3H)
	(CDCh) δ 1.77(8,3H),1.82(8,3H),3.48(8,3H),3.75(8,3H),4.64(d,J=6.6Hz,2H),5.51-5.55(m,1H),5.75(br,1H),6.77-6.80( .93-6.96(m,2H),7.17(dd,J=8.1,2.1Hz,1H),7.23-7.28(m,3H)
	.93-6.96(m,211),7.17(dd,J=8.1,2.1112,111),7.23-7.28(m,311)
	0447 0027 1600 1660 1699 1479 1909 1930 1906 1950 1191 1000 1050 000 000 000 000 000 000 000
	3111,2331,1030,1032,1322,1413,1332,1333,1239,1131,1050,1053,339,316,862,831,610,131,1040m
	.170°C
	$^{1}\text{HNMR}(\text{CD}_{3}\text{OD}) \ \delta  1.68 (s, 3\text{H}), 1.74 (s, 3\text{H}), 2.50 \cdot 2.58 (m, 2\text{H}), 3.41 (s, 3\text{H}), 3.73 (s, 3\text{H}), 4.05 (t, J=6.9\text{Hz}, 2\text{H}), 5.29 (m, 1\text{H}), 6.76 \cdot 6.79 (m, 2\text{Hz}, 2\text{Hz}), 6.76 \cdot 6.79 (m, 2\text{Hz}, 2\text{Hz}, 2\text{Hz}, 2\text{Hz}), 6.78 \cdot 6.79 (m, 2\text{Hz}, 2\text{Hz}$
IR(KBr)3 29cm <sup>-1</sup> m.p. 163-1	m,2H),6.98-7.17(m,6H)
29cm <sup>-1</sup>	IR(KBr)3411,2964,2936,1685,1613,1590,1523,1472,1379,1293,1259,1229,1131,1082,1061,1000,962,861,838,814,791,754,5
m.p.153-1	
•	.165%
1 456 HINMR(C	HNMR(CDCl3) 8 3.14(s,3H),3.50(s,3H),3.77(s,3H),5.20(s,2H),7.10-7.28(m,6H),7.38-7.50(m,5H),7.56(dd,J=8.4,2.1Hz,1H),7.
	2.1Hz,1H),9.98(s,1H)
IR(CHCl <sub>3</sub>	IR(CHCl <sub>3</sub> )2938,2843,1697,1604,1590,1517,1469,1372,1331,1293,1254,1172,1159,1123,1093,1005,963,818cm <sup>-1</sup>
m.p.143-14	.145°C
1 AS7 HINMR(C	HNMR(CDCl <sub>3</sub> ) δ 1.77(8,3H), 1.83(8,3H),3.44(8,3H),3.63(8,3H),3.75(8,3H),4.63(d,J=6.6Hz,2H),5.53(m,1H),5.72(br,1H),6.82-
6.85(m,2H)	:H),6.92·6.95(m,2H),7.16(dd,J=8.4,2.4Hz,1H),7.23·7.26(m,3H)
IR(CHCl <sub>3</sub>	IR(CHCl <sub>3</sub> )3595,3537,2938,1729,1612,1591,1522,1473,1395,1344,1290,1258,1173,1129,1081,1063,1003,900,862,836cm <sup>-1</sup>

Table 93

1-458	powder HINMR(CDCh <sub>3</sub> ) & 2.37(s,3H),3.08(s,3H),3.11(s,3H),3.21(s,3H),3.51(s,3H),3.52(s,3H),5.26(s,2H),7.19-7.23(m,2H),7.36-7.43( m,4H),7.45-7.50(m,2H),7.82(d,J=2.1Hz,1H),7.98(d,J=2.1Hz,1H) IR(CHCh <sub>3</sub> )3033,2942,1543,1377,1220,1181,1153,1034cm <sup>-1</sup>
1.459	m.p.182-187°C (dec.) 'HNMR(CDCI;)
1.460	powder 1HNMR(CDCl <sub>3</sub> ) δ 2.38(s,3H),2.83(s,3H),3.05(s,3H),3.22(s,3H),3.56(s,3H),3.80(s,3H),3.91(s,3H),5.13(s,2H),6.86(s,1H),7.20- 7.24(m,2H),7.37-7.46(m,4H),7.65-7.70(m,3H),7.89(d,J=2.1Hz,1H) IR(CHCl <sub>3</sub> )3032,2940,1728,1473,1373,1232,1179,1150,1085cm <sup>-1</sup>
1-461	amorphous IIINMR(CDCl <sub>3</sub> ) & 3.78(s,6H),5.16(s,2H),5.31(d,J=3.6Hz,1H),5.72(s,1H),6.91(s,1H),6.94(s,1H),6.99(d,J=8.2Hz,1H),7.04(t,J= 8.6Hz,1H),7.08(dd,J=8.2,2.1Hz,1H),7.22(d,J=2.1Hz,1H),7.25(ddd,J=8.6,1.8,0.9Hz,1H),7.34-7.46(m,6H) IR(CHCl <sub>3</sub> )3677,3548,1526,1495,1280,1635cm <sup>-1</sup>
1.462	m.p.163-165°C <sup>1</sup> HNMR(CDCl <sub>3</sub> ) δ 3.12(8,3H),3.26(8,3H),3.80(8,3H),3.81(8,3H),5.18(8,2H),6.91(8,1H),6.94(8,1H),7.12(d,J=8.4Hz,1H),7.36-7. 50(m,8H),7.59(d,J=1.8Hz,1H) IR(CHCl <sub>3</sub> )1494,1367,1212,1180,1116,872,808cm <sup>-1</sup>

Table 94

	mp.125-127 $\mathbb C$
	**************************************
1-463	), 6.91(s, 111), 6.95(s, 111), 7.06(d, J=8.711z, 111), 7.37(dd, J=8.7, 1.911z, 111), 7.47(m, 211), 7.50(d, J=2.41z, 111), 7.57(d, J=1.911z, 111), 7.47(m, 211), 7.57(d, J=2.41z, 111), 7.57(d, J=1.911z, 111), 7.41(m, 211), 7.4
	(1)
	IR(KBr)1523,1496,1370,1213,1175,1116,1035,977,832,807cm '
	m.p.149-151°C
	111111111111111111111111111111111111
1.464	),5.21(t,J=7.011z,111),6.91(s,111),6.94(s,111),7.05(d,J=8.411z,111),7.37(dd,J=8.4,2.1Hz,1H),7.40-7.47(m,2H),7.50(d,J=2.1Hz,1
	H),7.57(d,J=2.1Hz,1H)
	IR(KBr)1523,1495,1368,1212,1176,1116,1035,976,832,806cm. 1
	m.p.148-150°C
	1HNMR(CDCl <sub>3</sub> ) δ 2.38(s,3H),3.11(s,3H),3.26(s,3H),3.80(s,3H),3.81(s,3H),5.13(s,2H),6.91(s,1H),6.94(s,1H),7.12(d,J=8.4Hz,
cop-1	1H),7.22(d,J=7.8Hz,2H),7.35(d,J=7.8Hz,2H),7.37(dd,J=8.4,1.8Hz,1H),7.40·7.50(m,3H),7.69(d,J=1.8Hz,1H)
	IR(KBr)1523,1490,1370,1181,1115,971,868,806cm <sup>-1</sup>
	m.p.109-112°C
	$^{1}$ HNMR(CDCl <sub>3</sub> ) $^{5}$ 1.76(8,3H), 1.82(8,3H), 3.79(8,6H), 4.62(4,J=6.9Hz,2H), 5.26(4,J=3.9Hz,1H), 5.52(t,J=6.9Hz,1H), 5.72(8,1H),
1-466	6.91(s,1H),6.93(d,J=8.6Hz,1H),6.94(s,1H),7.04(t,J=8.7Hz,1H),7.07(dd,J=8.6,2.1Hz,1H),7.19(d,J=2.1Hz,1H),7.25(ddd,J=8.7,
	1.8,0.9Hz, 1H),7.37(dd,J=12.0,1.8Hz,1H)
	IR(CHCl <sub>3</sub> )3578,3542,1526,1495,1280,1055,1035cm <sup>-1</sup>

Table 95

55

50	45	AO	35	30	25	20	15	10	5
1-467	amorphous  HINMR(CDCl <sub>3</sub> ) δ 2.39(s,3H),3.79(s,6H),5.11(s,2H),5.40(brs,1H),5.73(s,1H),6.91(s,1H),6.94(s,1H),6.99(d,J=8.4Hz,1H),7.04(  t,J=8.7Hz,1H),7.08(dd,J=8.4,2.1Hz,1H),7.21(d,J=2.1Hz,1H),7.23(d,J=7.7Hz,2H),7.25(ddd,J=8.7,2.1,1.2Hz,1H),7.34(d,J=7.7Hz,2H),7.37(dd,J=11.7,2.1Hz,1H)  Hz,2H),7.37(dd,J=11.7,2.1Hz,1H)  IR(CHCl <sub>3</sub> )3577,3545,1526,1495,1280,1055,1035,868cm <sup>-1</sup>	2.39(s,3H),3.75 8(dd,J=8.4,2.1H =11.7,2.1Hz,1H)	7(s,6H),5.11(s) [z,1H),7.21(d,	,2H),5.40(brs,1 J=2.1Hz,1H),7 5,868cm <sup>-1</sup>	111),5.73(e, 111),	6.91(s, 1H), 6.9 2H), 7.25(ddd,	4(e, 11f), 6.99(d	1,J=8.4Hz,1H), 1z,1H),7.34(d,J	=7.7
1-468	amorphous  'IINMR(CDC3.) δ 1.69(s,311), 1.75(s,311), 2.53(q, J=7.011z,211), 3.78(s,311), 3.79(s,311), 4.07(t, J=7.211z,211), 5.22(t, J=7.011z,111),  5.27(d, J=3.911z,111), 5.71(s,111), 6.91(s,111), 6.91(d, J=8.611z,111), 6.94(s,111), 7.04(t, J=8.41z,111), 7.06(dd, J=8.6,2.11tz,111), 7.19  (d, J=2.11tz,111), 7.25(ddd, J=8.4,1.9,1.11tz,111), 7.37(dd, J=12.0,1.91tz,111)  IR(CHC13)3578, 1526, 1495, 1280, 1055, 1035cm <sup>-1</sup>	1.69(s,311),1.7f 1),5.71(s,1H),6.9 25(ddd,J=8.4,1.f 26,1495,1280,1f	5(s,3H),2.53(q 11(s,1H),6.91( 7,1.1Hz,1H),7	(d,J=8.6Hz,1H); 37(dd,J=12.0,	3.78(8,311),3.79 ,6.94(8,1H),7.0	)(6,3H),4.07(t,.	J=7.2Hz,2H),6 H),7.06(dd,J=	5.22(t,J=7.0Hz,	1H), 7.19
-469	m.p.190-191°C <sup>1</sup> HNMR(CDCl <sub>3</sub> ) δ 2.38(s,3H),3.11(s,3H),3.19(s,3H),3.80(s,6H),5.13(s,2H),6.92(s,1H),6.94(s,1H),7.12(d,J=8.7Hz,1H),7.22(d,J=7.8Hz,1H),7.32-7.37(m,4H),7.49(dd,J=2.1,8.4Hz,1H),7.59(d,J=1.8Hz,1H),7.60-7.65(m,2H) <sup>1</sup> IR(KBr)3600-2800(br),1621,1492,1468,1386,1366,1336,1292,1272,1259,1202,1174,1150,1113cm <sup>-1</sup>	2.38(s,3H),3.11 7.37(m,4H),7.49 (br),1621,1492,	(8,3H),3.19(8, )(dd,J=2.1,8.4	,3H),3.80(s,6H)  Hz,1H),7.69(d,  G6,1336,1292,1	),5.13(8,2H),6.9 ,J=1.8Hz,1H),7, 272,1269,1203	92(s,1H),6.94(e 7.60-7.65(m,2H	,1H),7.12(d,J <sup>3</sup>  } 13cm <sup>-1</sup>	=8.7Hz,1H),7.2	2(d,
1.470	In.p.147-148°C  IHNMR(CDCl <sub>3</sub> ) & 2.37(s,3H),3.19(s,3H),3.79(s,3H),3.80(s,3H),5.16(s,2H),6.92(s,1H),6.93(s,1H),7.06(t,J=8.7Hz,1H),7.20-7.2  7(m,3H),7.32-7.41(m,5H),7.60-7.64(m,2H)  IR(KBr)3600-2800(br),1523,1492,1462,1454,1379,1359,1299,1278,1264,1210,1175,1151,1129,1054,1031,1009cm <sup>-1</sup>	2.37(s,3H),3.19( (m,5H),7.60-7.64 (br),1523,1492,1	(s,3H),3.79(s,; 4(m,2H) 1462,1454,13	3H),3.80(6,3H),	,5.16(8,2H),6.9 278,1264,1210	2(6,1H),6.93(6,	1H),7.06(t,J=	8.7Hz,1H),7.20	-7.2
-471	m.p.170-172°C 'HNMR(CDCl <sub>3</sub> ) δ 3.19(s,3H),3.24(s,3H),3.79(s,3H),5.80(s,3H),5.12(s,2H),6.92(s,1H),6.94(s,1H),7.11(d,J=8.7Hz,1H),7.26-7. 30(m,2H),7.32-7.37(m,2H),7.47(dd,J=2.4,8.4Hz,1H),7.61-7.64(m,3H),7.74-7.80(m,1H),8.61-8.63(m,1H) IR(KBr)3600-2800(br),1522,1491,1462,1361,1296,1264,1212,1177,1149,1115,1030cm <sup>-1</sup>	3.19(s,3H),3.24 7(m,2H),7.47(dd (br),1522,1491,1	(8,3H),3.79(6, ,J=2.4,8.4Hz, 1462,1361,129	3H),3.80(s,3H) 1H),7.61-7.64( 96,1264,1212,1	,5.12(8,2H),6.9 m,3H),7.74-7.8 177,1149,1115	)2(s,1H),6.94(s) (0(m,1H),8.61-1	,1H),7.11(d,J: 8.63(m,1H)	=8.7Hz,1H),7.2	6-7.

Table 96

.

HANDER (CDC   11, 0   3.19(s, 311), 3.79(s, 311), 5.33(s, 211), 6.92(s, 111), 6.93(s, 111), 7.07(d, J=8.71z, 111), 1.00.7.6.d(m, 311), 7.73-7.79(m, 111), 8.60-8.63(m, 111)   118(k1br)3600-2800(br), 1524, 1491, 1464, 1380, 1361, 1302, 1267, 1209, 1172, 1149, 1130, 1034, 1024, 1008em <sup>-1</sup>   118(k1br)3600-2800(br), 1524, 1491, 1464, 1380, 1361, 1302, 1267, 1209, 1172, 1149, 1130, 1034, 1024, 1008em <sup>-1</sup>   119, 6.91(s, 111), 6.93(s, 111), 7.02(t, J=8.711z, 111), 7.26-7.30(m, 111), 7.35-7.43(m, 311)   118(k1br)3600-2800(br), 1625, 1527, 1491, 1461, 1449, 1378, 1298, 1279, 1269, 1207, 1184, 1125, 1055, 1031cm <sup>-1</sup>   118(k1br)3600-2800(br), 1625, 1527, 1491, 1461, 1449, 1378, 1298, 1279, 1269, 1207, 1184, 1125, 1055, 1031cm <sup>-1</sup>   118(k1br)3600-2800(br), 1625, 1495, 1495, 1495, 130, 130, 1267, 1210, 1166, 1139, 1129, 1054, 1032cm <sup>-1</sup>   118(k1br)3600-2800(br), 1526, 1495, 1495, 1326, 1399, 1264, 1208, 1170, 139, 1054, 1031cm <sup>-1</sup>   118(k1br)3600-2800(br), 1627, 1491, 1491, 1491, 1493, 1444, 1463, 1448, 1379, 1317, 1209, 1264, 1209, 1130, 1055, 1032cm <sup>-1</sup>   118(k1br)3600-2800(br), 1665, 1604, 1623, 1448, 1379, 1317, 1299, 1264, 1209, 1130, 1055, 1033cm <sup>-1</sup>   118(k1br)3600-2800(br), 1666, 1604, 1623, 1448, 1379, 1317, 1299, 1264, 1209, 1130, 1055, 1033cm <sup>-1</sup>   118(k1br)3600-2800(br), 1666, 1604, 1623, 1448, 1379, 1317, 1299, 1264, 1209, 1130, 1055, 1033cm <sup>-1</sup>   118(k1br)3600-2800(br), 1666, 1604, 1623, 1448, 1379, 1317, 1299, 1264, 1209, 1130, 1055, 1033cm <sup>-1</sup>   118(k1br)3600-2800(br), 1666, 1604, 1623, 1448, 1379, 1317, 1299, 1264, 1209, 1130, 1055, 1033cm <sup>-1</sup>   118(k1br) 1180, 1180, 1180, 1180, 1180, 1180, 1180, 1180, 1055, 1033cm <sup>-1</sup>   118(k1br) 1180, 1180		
		m.p.174-175°C
		111111111111111111111111111111111111
		:12-7.37(m,211),7.41(dd,J=1.8,12.611z,111),7.60-7.64(m,311),7.73-7.79(m,111),8.60-8.63(m,111)
		1R(KBr)3600-2800(br), 1524, 1491, 1464, 1380, 1361, 1302, 1267, 1209, 1172, 1149, 1130, 1034, 1024, 1008cm <sup>-1</sup>
		m.p.118.5-119.5°C
		$HNMR(CDCL_3) \ \delta - 1.77(s,3H), 1.80(d,J=0.9Hz,3H), 3.78(s,3H), 3.79(s,3H), 4.63(d,J=6.9Hz,2H), 5.52-5.57(m,1H), 6.73-6.78(m,2H), 6.73-6.78(m$
		H),6.91(8, 1H),6.93(8, 1H),7.02(t,J=8.7Hz,1H),7.25-7.30(m, H),7.35-7.43(m,3H)
		IR(KBr)3600-2800(br), 1625, 1527, 1491, 1461, 1449, 1378, 1298, 1279, 1259, 1207, 1184, 1125, 1055, 1031cm <sup>-1</sup>
		m.p.156-158°C
		111111111111111111111111111111111111
<del></del>	1.474	,6.93(s, 1H),6.94(s, 1H),7.03(t,J=8.4Hz,11I),7.26-7.30(m,3H),7.37(dd,J=1.8,12.6Hz,1H),7.57-7.61(m,2H)
		IR(KBr)3600-2800(br), 1526, 1495, 1463, 1382, 1325, 1300, 1267, 1210, 1156, 1139, 1129, 1054, 1032cm <sup>-1</sup>
		m.p.158-160°C
		111NMR(CDCC)C:13) & 1.77(a, 3H), 1.81(a, 3H), 3.80(a, 6H), 4.64(d, J=6.6Hz, 2H), 4.73(bra, 2H), 5.53-5.57(m, 1H), 6.51(bra, 1H), 6.93(a, 1H), 6.93(a
		H),6.94(s, 1H),7.03(t,J=8.7Hz, 1H),7.26-7.31(m,3H),7.37(dd,J=2.1,12.6Hz,1H),7.57-7.61(m,2H)
		IR(KBr)3600-2800(br), 1527,1495,1462,1395,1326,1299,1264,1208,1170,1130,1054,1031cm <sup>-1</sup>
		m.p.138-140°C
		$1 + \text{NMR}(\text{CDC}_{13}) \delta \ 1.77(s, 3H), 1.81(s, 3H), 2.21(s, 3H), 3.78(s, 3H), 3.80(s, 3H), 4.63(d, J = 6.9Hz, 2H), 5.53 \cdot 5.57(m, 1H), 6.93(s, 1H), 6.93(s, 2H), 6.93(s, 2$
IR(KBr)3600-2800(br), 1666, 1604, 1527, 1494, 1463, 1448, 1379, 1317, 1299, 1264, 1209, 1130, 1055, 1		94(s,1H),7.03(t,J=8.4Hz,1H),7.20(brs,1H),7.26-7.30(m,1H),7.37(dd,J=2.1,12.6Hz,1H),7.56(m,4H)
		IR(KBr)3600-2800(br), 1666,1604,1627,1494,1463,1448,1379,1317,1299,1264,1209,1130,1055,1032cm-1

Table 97

	IN.P.200-202°C
1-477	-4(*, 1H),7.03(t, J=9.0Hz, 1H),7.27-7.30(m, 1H),7.34-7.41(m, 3H),7.52-7.55(m, 2H)
	IR(KBr)3600-2800(br),2404,1684,1660,1584,1528,1493,1462,1386,1301,1274,1263,1209,1132,1053,1029cm <sup>-1</sup>
	m.p.195-196.5°C
į	4HNMR(CDC13) § 1.55(8,9H),3.78(8,3H),3.79(8,3H),4.85(8,1H),6.75(brs,1H),6.88-6.92(m,2H),6.92(8,1H),6.93(8,1H),7.31-7.3
£	9(m,:11),7.45-7.49(m,211),8.12(t,J=7.511z,111)
	IR(KBr)3600-2800(br),1729,1590,1531,1500,1464,1394,1261,1240,1199,1156,1055,1033,1023cm" <sup>1</sup>
	m.p.172-174°C
	"HNMR(CDCl <sub>13</sub> ) & 1.55(s,9H),3.19(s,3H),3.79(s,3H),3.80(s,3H),6.75(d,J=2.1Hz,1H),6.92(s,1H),6.94(s,1H),7.26-7.39(m,5H),7.
₹ <u>*-</u>	60-7.65(m,2H)
	IR(KBr)3600-2800(br), 1728, 1590, 1531, 1513, 1494, 1464, 1391, 1367, 1352, 1240, 1206, 1179, 1145, 1056, 1033, 1024cm <sup>-1</sup>
	m.p.152-153°C
007	$^{1}\text{HINMIR}(\text{CDCL}_3) \ \delta \ \ 1.74(\text{s}, 311), 1.77(\text{s}, 311), 3.18(\text{s}, 311), 3.78(\text{d}, J=9.911\text{z}, 211), 3.79(\text{s}, 611), 3.93(\text{brs}, 111), 5.35-5.40(\text{m}, 111), 6.75(\text{t}, J=8)$
1-400	.4Hz,1H),6.91(s,1H),6.95(s,1H),7.24-7.36(m,4H),7.60-7.65(m,2H)
	IR(KBr)3600-2800(br), 1630, 1530, 1488, 1466, 1380, 1366, 1346, 1259, 1213, 1176, 1149, 1124, 1054, 1027cm <sup>-1</sup>
	foam
107	$^{1}\text{HNMR}(\text{CDC} _{3}) \ \delta \ \ 2.40(s,3H), 3.19(s,3H), 3.77(s,3H), 3.78(s,3H), 6.80(t,d=2.4Hz,1H), 6.90(s,1H), 6.91(s,1H), 7.25\cdot7.36(m,6H), 7.10(s,1H), 6.91(s,1H), 6.91(s,1H), 6.91(s,1H), 7.10(s,1H), 7.10(s$
104-1	58·7.65(m,3H),7.72·7.76(m,2H)
	IR(KBr)3600-2800(br), 1522, 1490, 1366, 1342, 1211, 1164, 1151, 1091, 1053, 1030cm <sup>-1</sup>

Table 98

	m.p.201-203°C
107	HINMR(CDCl <sub>3</sub> ) δ 2.45(s,3H),3.20(s,3H),3.82(s,6H),6.95(s,1H),6.98(s,1H),7.32-7.48(m,6H),7.61-7.66(m,2H),7.80-7.84(m,2H
796-1	),8.10(d,J=3.3Hz,1H),8.55(d,J=8.4Hz,1H)
	IR(KBr)3600-2800(br), 1671,1592,1524,1494,1388,1366,1328,1265,1207,1172,1150,1052,1024cm <sup>1</sup>
	m.p.132-134°C
į	$HNMR(\mathrm{CDCL}_3) \ \delta  1.55(s,9H), 3.00(s,6H), 3.79(s,6H), 6.73(d,J=2.4Hz,1H), 6.81(m,2H), 6.92(s,1H), 6.96(s,1H), 7.32-7.39(m,2H), 1.32-7.39(m,2H), 1.32-7$
1.483	7.48-7.52(m,2H),8.11(t,J=8.1Hz,1H)
	IR(KBr)3600-2800(br),1728,1610,1591,1533,1499,1459,1446,1381,1365,1238,1206,1159,1055,1030cm <sup>-1</sup>
	foam
	HNMR(CDCl <sub>3</sub> ) & 1.74(s,3H),1.77(s,3H),3.00(s,6H),3.78(d,J=9.6Hz,1H),3.78(s,3H),3.79(s,3H),5.34-5.38(m,1H),6.75(t,J=8.4
<u> </u>	[12,111],6.92(s,111),6.94(s,111),6.93-6.95(m,111),7.23-7.32(m,311),7.48-7.52(m,2H)
	IR(KBr)3600-2800(br),1625,1611,1531,1494,1446,1380,1340,1257,1207,1123,1055,1032cm <sup>-1</sup>
	foam
	111NMR((31)(31) & 2.40(8,311),3.00(8,611),3.76(8,311),3.77(8,3H),6.70(t,J=2.4Hz,1H),6.80(t,J=8.7Hz,2H),6.87(8,1H),6.94(8,1H)
1.485	),7.24-7.33(m,4H),7.46-7.50(m,2H),7.60(t,J=9.0Hz,1H),7.71-7.76(m,2H)
	IR(KBr)3600-2800(br),1609,1529,1493,1446,1381,1340,1208,1164,1090,1054,1031cm <sup>-1</sup>
	m.p.184-186°C
,	111111111111111111111111111111111111
1.480	H),7.40.7.52(m,4H),7.80.7.84(m,2H),8.08(d,J=2.7Hz,1H),8.52(t,J=8.4Hz,1H)
	IR(KBr)3600-2800(br),1647,1608,1530,1497,1379,1365,1284,1267,1206,1051,1030cm <sup>-1</sup>

Table 99

)    -	5		;		5	2	5	,	
1-487	foam 41NMR(C) 7.26(m,2H) 4112,111) 1R(KBr)36	i(s,3H),3.77 n,2H),7.53(	7(s,611),4.81( [dd,J=1.5,8.4]	brs, 111),6.69( 1Hz, 1H),7.59( 459,1444,136	dd,J=0.9,3.61 d,J=3.6Hz,11 9,1259,1208,	12, 1H), 6.88-6.9 ]), 7.73(d, J=0.9	2(m,2H),6.94( Hz,1H),7.80-7 2,1051,1028cm	:DC!;)	1,J=8.
1.488	m.p.219-220°C !!INMR(CDCL;) & 2.37(s,3H),3.19(s,3H),3.78(s,3H),3.79(s,3H),6.70(dd,J=0.9,3.6Hz,1H),6.94(s,1H),6.97(s,1H),7.24-7.27(m,2 H),7.32-7.37(m,2H),7.53(dd,J=1.8,8.7Hz,1H),7.60(d,J=3.6Hz,1H),7.61-7.66(m,2H),7.73(d,J=0.9Hz,1H),7.80-7.84(m,2H),8.0 3(d,J=8.7Hz,1H) IR(KB <sub>1</sub> )3600-2800(br),1513,1494,1464,1444,1373,1209,1173,1155,1122,1049cm <sup>-1</sup>	(a,311),3.19 (3(dd,J=1.8 1513,1494	(s,311),3.78(s ,8.7Hz,1H),7	,3H),3.79(e,3 7.60(d,J=3.6H 373,1209,117	),6.70(dd,J=  z,1H),7.61-7.   3,1166,1122,	0.9,3.6Hz, 1H), 66(m,2H),7.73	6.94(e,1H),6.9 (d,J=0.9Hz,1H	20°C  DCl <sub>3</sub> )	7(m,2 H),8.0
I-489	<sup>1</sup> HNMR(CDCl <sub>3</sub> ) δ 3.79(s,3H),3.80(s,3H),3.94(s,3H),5.17(s,2H),5.71(s,1H),6.96(s,1H),6.97(s,1H),6.99(d,J=8.7Hz,1H),7.09(d.d,J=8.74z,1H),7.09(d.d,J=8.74z,1H),7.22(d,J=2.4Hz),7.26(s,1H),7.32-7.49(m,5H),7.66(d,J=8.7Hz,2H),8.09(d,J=8.7Hz,2H) 1R(KB <sub>1</sub> )33383,1702,1606,1489,1381,1291,1206,1111,1032,1002cm <sup>-1</sup>	1(s,3H),3.8C 2(d,J=2.4H 3,1489,138	1291,1206,1H	DCl <sub>3</sub> ) δ 3.79(s,3H),3.80(s,3H),3.94(s,3H),5.17(s,2H),5.71( .4Hz,1H),7.22(d,J=2.4Hz),7.26(s,1H),7.32-7.49(m,5H),7.66 83,1702,1606,1489,1381,1291,1206,1111,1032,1002cm <sup>-1</sup>	2H),5.71(s,1H ,5H),7.66(d,J 102cm - 1	),6.96(s,1H),6.1 =8.7Hz,2H),8.0	)7(s,1H),6.99(d	d,J=8.7Hz,1H),7 2H)	.09(d.
I-490	"HINMR(CDCI <sub>3</sub> ) & 3.12(8,3H),3.79(8,3H),3.81(8,3H),395(8,360(d,J=2.1Hz,1H),7.65(d,J=8.7Hz,2H),8.10(d,J=8.7Hz,2H) IR(KBr)1720,1607,1492,1362,1275,1211,1112,1057,1032cr	(4,311),3.79 (d,J=8.7Hz, 2,1362,127	(s,311),3.81(c,2H),8.10(d,J	DCl <sub>3</sub> ) δ 3.12(ε,311),3.79(ε,311),3.81(ε,311),395(ε,311), Hz,1H),7.65(d,J=8.7Hz,2H),8.10(d,J=8.7Hz,2H) 20,1607,1492,1362,1275,1211,1112,1057,1032cm <sup>-1</sup>	H), 5.18(8, 2H),	,6.96(s,2H),7.1	2(d,J=8.4Hz,1	DCh <sub>3</sub> ) δ 3.12(a,3H),3.79(a,3H),3.81(a,3H),395(a,3H),5.18(a,2H),6.96(a,2H),7.12(d,J=8.4Hz,1H),7.31-7.53(m,6H),7. Hz,1H),7.65(d,J=8.7Hz,2H),8.10(d,J=8.7Hz,2H) 20,1607,1492,1362,1275,1211,1112,1057,1032cm <sup>-1</sup>	3H),7.
1.491	"IINMR(CDCt <sub>3</sub> ) \(\delta\) 3.12(a,3H),3.80(a,3H),3.81(a,3H),5.18(a,2H),6.92(a,1H),6.96(a,1H),7.13(d,J=8.4Hz,1H),7.31·7.52(m,6H),7.70(d,J=2.1Hz,1H),7.66·7.77(m,4H)  70(d,J=2.1Hz,1H),7.66·7.77(m,4H)  IR(KB <sub>7</sub> )3433,1685,1606,1609,1492,1372,1318,1264,1211,1183,1111,1055,1031cm <sup>-1</sup>	(a,3H),3.80(7.77(m,4H)	(e,311),3.81(s) ) 2,1372,1318,	,3H),5.18(e,2 1264,1211,11	DC! <sub>3</sub> ) δ 3.12(a,3H),3.80(a,3H),3.81(a,3H),5.18(a,2H),6.92(a,1H),6.96(a,1H), Hz,1H),7.66-7.77(m,4H) 33,1685,1606,1609,1492,1372,1318,1264,1211,1183,1111,1055,1031cm <sup>-1</sup>	6.96(s,1H),7.1.	3(d,J=8.4Hz,1	H),7.31-7.52(m,6	3H),7.
1-492	<sup>1</sup> HNMR(CDCl <sub>3</sub> ) δ 3.79(8,3H),3.80(8,3H),5.17(8,2H),5.71(8,2H),6.91(8,1H),6.97(8,1H),7.00(d,J=8.4Hz,1H),7.08(dd,J=8.4&2.4 Hz,1H),7.22(d,J=2.4Hz,1H),7.32-7.49(m,5H),7.70(8,4H) IR(KBr)3291,2242,1607,1579,1488,1384,1324,1272,1209,1130,1054,1034,1001cm <sup>-1</sup>	(s,3H),3.80( ,1H),7.32-7 1,1579,1488	(e,3H),5.17(e).49(m,5H),7.3,1384,1324,	,2H),5.71(s,2 .70(s,4H) 1272,1209,11	H),6.91(s,11H), 30,1054,1034	6.97(s,1H),7.0	0(d,J=8.4Hz,1	H),7.08(dd,J=8.	18.2.4

Table 100

	111 NMR(CDCl3) & 3.12(s,3H),3.80(s,3H),3.81(s,3H),5.18(s,2H),6.92(s,1H),6.96(s,1H),7.12(d,J=8.4Hz,1H),7.31-7.72(m,6H),7.
1.493	60(d,J=1.8Hz, 1H),7.65-7.74(m,4H)
	IR(KBr)2223,1604,1490,1363,1296,1264,1213,1172,1117,1055,1036,1026cm <sup>1</sup>
	111NMR(CDCE) & 1.77(s,311), 1.81(s,311), 3.23(s,311), 3.80(s,311), 3.81(s,311), 3.95(s,311), 4.64(d,J=6.6Hz,211), 5.51(t,J=6.6Hz,111
1-494	), 6.96(s, 211), 7.06(d, J=8,711z, 111), 7.50(d, d, J=8.7&2, 111z, 111), 7.59(d, J=2, 111z, 111), 7.65(d, J=8.711z, 211), 8.10(d, J=8.711z, 211)
	IR(KB)1720,1608,1508,1492,1384,1357,1273,1179,1110,1026,1019cm
	41NMR(CDCh) & 2:38(s,311),3.12(s,311),3.80(s,611),3.81(s,311),3.95(s,311),5.14(s,211),6.96(s,211),7.13(d,J=8.4Hz,111),7.21(d,
1.495	J=7.811z,211),7.35(d,J=7.811z,211),7.49(d.d,J=8.4&1.811z,111),7.60(d,J=1.811z,111),7.65(d,J=8.711z,211),8.10(d,J=8.711z,211)
	IR(KBr)1697,1607,1492,1364,1286,1263,1213,1178,11115,1057,1030cm.1
1.496	1-496 IR(KBr)1730,1701,1610,1515,1465,1359,1238,1186,1116,1082,1064,1016cm <sup>-1</sup>
	111NMR(CDC13) & 1.75(8,3H), 1.80(8,3H), 2.89(8,6H), 3.21(8,3H), 3.44(8,3H), 3.68(8,3H), 3.77(8,1H), 4.61(d, J=8.4Hz, 2H), 5.49(t, J
107	=8.4Hz,1H),6.92(e,1H),7.01(d,J=8.4Hz,1H),7.25-7.28(m,3H),7.33(d,J=2.1Hz,1H),7.52(dd,J=8.4&1.8Hz,1H),7.66(d,J=2.4Hz,
/65-1	IH)
	IR(KBr)1727,1598,1515,1467,1360,1295,1258,1241,1116,1084cm <sup>-1</sup>
	1HNMR(CDC13) & 2.38(8,3H), 2.89(8,6H), 3.10(8,3H), 3.44(8,3H), 3.66(8,3H), 3.77(8,3H), 5.11(8,3H), 6.93(8,1H), 7.06-7.15(m,2H),
I-498	7.17-7.29(m,4H),7.31-7.37(m,3H),7.53(d.d,J=8.7&1.8Hz,1H),7.66(dJ=1.8Hz,1H)
	IR(KBr)1732,1701,1598,1518,1466,1352,1294,1121,1085,1060,1015cm <sup>-1</sup>
	1HNMR(CDCl <sub>3</sub> ) & 2.88(s,6H),3.44(s,3H),3.64(s,3H),3.77(s,3H),5.17(s,2H),5.65(s,1H),6.84(dd,J=8.1&2.1Hz,1H),6.92(s,1H),6
1.499	.95(d,J=8.1Hz,1H),7.01(d,J=2.1Hz,1H),7.12(d,J=8.4Hz,1H),7.31-7.46(m,6H),7.53(d.d,J=8.4&1.8Hz,1H),7.66(d,J=1.8Hz,1H)
	IR(KBr)3526,3434,1732,1598,1515,1460,1344,1260,1240,1222,1061,1013cm <sup>-1</sup>

Table 101

1.500	IHNMR(CDCla) & 2.60(8,3H),3.43(8,3H),3.72(8,3H),3.75(8,3H),5.17(8,2H),5.67(8,1H),6.77(8,1H),6.94(dd,J=8.4&1.8Hz,1H),7.02(d,J=8.4Hz,1H),7.06(d,J=1.8Hz,1H),7.32.7.50(m,7H),7.53-7.62(m,1H),7.94(d,J=7.8Hz,1H) IR(KBr)1732,1719,1585,1521,1481,1403,1352,1289,1253,1225,1172,1073,1012cm-1
1.501	<sup>1</sup> HINMR(CDCl <sub>3</sub> ) δ 2.73(s,3H),3.12(s,3H),3.43(s,3H),3.72(s,3H),3.76(s,3H),5.19(s,2H),6.78(s,1H),7.15(d,J=8.4Hz,1H),7.31-7. 63(m,10H),9.96(d,J=6.6Hz,1H) IR(KBr)1726,1609,1520,1480,1400,1371,1294,1262,1179,1076,1009cm <sup>-1</sup>
1.502	**HINMR(CDCh;)
1-503	IINMR(CDCh <sub>3</sub> ) & 1.78(a,3H),1.81(a,3H),3.21(a,3H),3.48(a,3H),3.72(a,3H),3.74(a,3H),3.82(a,3H),4.33(d,J=11.7Hz,1H),4.54(d,J=11.7Hz,1H),4.54(d,J=11.7Hz,1H),4.65(d,J=8.4Hz,1H),6.68(a,1H),6.69(a,1H),6.89(a,1H),7.38(d,J=8.7Hz,2H),7.73(d,J=8.7Hz,2H) z,2H) IR(KBr)3530,1609,1515,1467,1356,1214,1174,1151,1075,1039,1004cm <sup>-1</sup>
I-504	"HINMR(CDCh.) & 1.77(8,311), 1.80(8,311), 3.22(8,311), 3.45(8,311), 3.75(8,311), 3.77(8,311), 3.81(8,311), 4.62(d,J=6.9Hz,211), 5.55(t,J=6.9Hz,1H), 6.64(8,1H), 6.77(8,1H), 6.97(8,1H), 7.39(d,J=8.7Hz,2H), 7.72(d,J=8.7Hz,2H) IR(KBr)3431,1735,1706,1609,1514,1474,1367,1206,1176,1150,1055,1039cm <sup>-1</sup>
1.505	<sup>1</sup> HNMR(CDCl <sub>3</sub> ) & 1.77(s,3H), 1.80(s,3H), 2.94(broad,1H), 3.47(s,3H), 3.72(s,3H), 3.73(s,3H), 3.81(s,3H), 4.32(s,1H), 4.36(s,1H), 4.36(s,
1.506	<sup>1</sup> HNMR(CDCl <sub>3</sub> ) δ 1.76(s,3H),1.79(s,3H),3.44(s,3H),3.74(s,3H),3.76(s,3H),3.80(s,3H),4.63(d,J=7.2Hz,2H),5.30(s,1H),6.49-5.60 (m, 1H), 6.63(s,1H),6.78(s,1H),6.94(d,J=8.7Hz,2H),6.97(s,1H),7.54(d,J=8.7Hz,2H) IR(KBr)3382,1726,1699,1611,1519,1470,1206,1174,1143,1074,1056,997cm. <sup>1</sup>

1-507	4.74.5.02 (brond, 111), 5.52.5.60(m, 111), 6.63(s, 111), 6.75(s, 111), 6.91(d, J=8.711z, 2H), 6.94(s, 111), 7.54(d, J=8.7 Hz, 2H)
	1R/RB-13/423, 1734, 1612, 1520, 1475, 1441, 1395, 1337, 1267, 1215, 1173, 1140, 1017, cm <sup>-1</sup>
	111NMR(CDCh) 3.21(8,311),3.45(8,311),3.73(8,311),4.41.4.62(m,211),5.16(8,211),5.71(8,111),6.79(d.d,J=8.1&2.117,111),6.84(8
1.508	.1H), 6.92(d, J=2.1Hz, 1H), 7.01(d, J=8.1Hz, 1H), 7.32-7.50(m, 7H), 7.71(d, J=8.4Hz, 2H)
	1R(KBr)3496,3255,1607,1590,1528,1473,1464,1358,1247,1147,1071,1017cm <sup>-1</sup>
	HINMR(CDCL), \$\delta  3.21(8,3H), 3.45(8,3H), 3.73(8,3H), 3.89(8,3H), 4.51(d, J=6.3Hz, 2H), 5.20(8,2H), 6.80(d.d, J=8.1&2.1Hz, 1H), 6.
1.509	85(s,111),6.89(d,J=2.1Hz,111),6.97(d,J=8.111z,111),7.29.7.51(m,711),7.71(d,J=8.7Hz,2H)
	1R(KBr)3412,1603,1586,1515,1464,1364,1242,1175,1151,1081,1020,1006cm <sup>-1</sup>
	$HNMR(\mathrm{CDCl_3}) \ \delta \ 1.76(s,3H), 1.80(s,3H), 3.22(s,3H), 3.45(s,3H), 3.73(s,3H), 3.87(s,3H), 4.52(s,2H), 4.64(d,J=6.6Hz,2H), 5.57(t,J=4)$
1.510	=6.6Hz,1H),6.83(dd,J=7.5&1.2Hz,1H),6.86(d,J=1.2Hz,1H),6.96(d,J=7.5Hz,1H)
	IR(KBr)3433,1598,1579,1517,1469,1372,1244,1221,1174,1149,1072,1017cm <sup>-1</sup>
	HNMR(CDCl3) & 2.36(8,3H),3.21(8,3H),3.45(8,3H),3.72(8,3H),3.88(8,3H),4.50(8,2H),5.16(8,2H),6.80(dd,J=8.1&2.1Hz,1H),6
1-511	.85(8,1H),6.88(d,J=2.1Hz,1H),6.97(d,J=8.1Hz,1H),7.20(d,J=8.4Hz,2H),7.33-7.42(m,4H),7.71(d,J=8.4Hz,2H)
	IR(KBr)3502,1604,1510,1465,1383,1360,1266,1239,1227,1147,1071,1008cm <sup>-1</sup>
	HNMR(CDCl <sub>3</sub> ) δ 3.45(8,3H), 3.72(8,3H), 3.89(8,3H), 4.48(8,2H), 5.20(8,2H), 6.81(dd, J=8.1&2.1Hz,1H), 6.86(8,1H),6.88-
1.512	1.512 6.99 (m, 4H), 7.27-7.43 (m,3H), 7.46-7.54(m,4H)
	IR(KBr)3528,1610,1591,1617,1474,1461,1438,1388,1263,1239,1173,1140,1017,cm <sup>-1</sup>
	1HNMR(CDCl <sub>1</sub> ) & 1.75(8,3H), 1.79(8,3H), 2.47(broads,1H), 3.45(8,3H), 3.73(8,3H), 3.86(8,3H), 4.52(8,2H), 4.63(d,J=6.6Hz,2H), 5.
1.513	
	IR(KDr)3477,3246,1609,1586,1518,1464,1439,1387,1266,1240,1221,1173,1141,1079,1011,1002cm-1

Table 103

	111 HINMR(CDCta) & 2.36(s, 3H), 2.48(broad, 1H), 3.44(s, 3H), 3.72(s, 3H), 3.88(s, 3H), 4.50(s, 2H), 5.16(s, 3H), 6.76-6.98(m, 6H),
1.514	7.19 (d, .1=7.811z, 211), 7.36(d, J=7.811z, 211), 7.52(d, J=8.711z, 211)
	IR(KIb <sub>7</sub> )3544,3239,1614,1593,1519,1463,1386,1266,1240,1218,1173,1139,1074,1010cm <sup>-1</sup>
	m.p.159-160°C
L.	$^{11} \text{INMR} (\text{CDC}13) \ \delta \ \ 3.19 (\$, 311), 3.34 (\$, 311), 3.79 (\$, 311), 3.80 (\$, 311), 5.18 (\text{ABq,J} = 12.3 \text{Hz,2}1), 6.92 (\$, 111), 6.93 (\$, 111), 7.08 (4, J = 8.7 \text{Hz,2}1), 6.93 (\$, 111), $
616-1	z, 1H),7.33-764(m,11H)
	IR(KIR)3433,2937,1694,1520,1492,1369,1288,1243,1211,1176,1150,1100cm 1
	111NMR(CDCR) & 2.91(s,3H),3.777(s,3H),3.783(s,3H),4.85(brs,1H),5.12(s,2H),6.87.7.00(m,7H),7.32-7.50(m,7H)
010-1	IR(KBr)3432,2938,1609,1590,1525,1494,1380,1254,1207,1174,1152,1058,1031cm-1
	m.p.213-215°C
7.27	$^{1} \text{HNMR}(\text{CDCL}_3) \ \delta  2.99 (s, 311), 3.779 (s, 311), 3.804 (s, 311), 4.86 (brs, 111), 5.16 (s, 211), 6.83 (brs, 111), 6.93 (s, 111), 6.94 (s, 111), 7.06 (d, J=1), 2.99 (s, 211), 2.99 (s, 211), 3.804 (s, 211), 4.86 (brs, 111), 5.16 (s, 211), 6.83 (brs, 111), 6.93 (s, 211), 6.94 (s, 211), 7.06 (d, J=1), 3.804 (s, 211), 3.804 (s, 211), 4.86 (brs, 111), 5.16 (s, 211), 6.83 (brs, 111), 6.93 (s, 211), 6.94 (s, 211), 7.06 (d, J=1), 4.86 (brs, 111), 6.16 (s, 211), 6.93 (s, 211), 6.93 (s, 211), 6.94 (s, 211), $
10:1	8.7Hz,1H),7.35(dd,J=2.1,8.7Hz,1H),7.41·7.49(m,7H),7.81(d,J=2.1Hz,1H)
	IR(KBr)3409,3374,1610,1525,1491,1371,1321,1251,1208,1145,1120,1037cm <sup>-1</sup>
	powder
013	$^{1}\text{HNMR}(\text{CDCl}_{3}) \ \delta  1.75 (s, 3H), 1.81 (s, 3H), 2.84 (s, 3H), 3.21 (s, 3H), 3.22 (s, 3H), 3.55 (s, 3H), 3.79 (s, 3H), 3.93 (s, 3H), 4.67 (d, J=7.2Hz, 3.14), 3.14 (s, 3H), $
010-1	2H),5.59(m,1H),6.85(s,1H),7.36·7.42(m,2H),7.62(d,J=2.1Hz,1H),7.65·7.70(m,2H),7.86(d,J=2.1Hz,1H)
	IR(CHCl <sub>3</sub> )3026,2940,1728,1510,1473,1373,1179,1150,1086cm <sup>-1</sup>
	powder
012	$^{1} \text{HNMR}(\text{CDC} _{3}) \ \delta \ \ 1.69(\text{s}, 3\text{H}), 1.74(\text{s}, 3\text{H}), 2.52 - 2.61(\text{m}, 2\text{H}), 2.86(\text{s}, 3\text{H}), 3.20(\text{s}, 3\text{H}), 3.21(\text{s}, 3\text{H}), 3.56(\text{s}, 3\text{H}), 3.79(\text{s}, 3\text{H}), 3.93(\text{s}, 3\text{H}), 3.86(\text{s}, 3\text{H}), 3.86(s$
610-1	4.21(t,J=6.9Hz,2H), 5.26(m,1H), 6.86(s,1H), 7.36-7.42(m,2H), 7.62(d,J=2.1Hz,1H), 7.65-7.70(m,2H), 7.86(d,J=2.1Hz,1H)
	IR(CHCl <sub>3</sub> )3024,2939,1729,1511,1475,1447,1373,1179,1150,1085cm <sup>-1</sup>

Table 104

1.520	powder HINMR(CDCB <sub>3</sub> ) & 2.84(s,3H),3.21(s,3H),3.22(s,3H),3.56(s,3H),3.81(s,3H),3.88(s,3H),5.30(s,2H),6.86(s,1H),7.26-7.32(m,1H), 7.37-7.42(m,2H),7.65-7.72(m,4H),7.76-7.83(m,1H),7.92(d,J=2.1Hz,1H),8.60-8.63(m,1H) IR(KBr)343,3019,2940,1730,1511,1474,1367,1178,1151,1082 <sub>cm</sub> -1
1-621	powder <sup>1</sup> HNMR(CDCl <sub>3</sub> +CD <sub>3</sub> OD) δ 1.69(s,3H), 1.77(s,3H), 2.51-2.58(m,2H), 3.43(s,3H), 3.73(s,3H), 4.23(t,J=6.6Hz,2H), 6.44(s,1H), 6.89 -6.95(m,2H), 7.24(d,J=1.8Hz,1H), 7.46-7.52(m,2H), 7.65-7.67(m,1H) IR(KBr)3434,2934,1716,1611,1402,1226,1116,1082,1027cm
1-522	m.p.240-243°C <sup>1</sup> HNMR(CDCl <sub>3</sub> +CD <sub>3</sub> OD) δ 3.44(s,3H),3.75(s,3H),5.31(s,2H),6.46(s,1H),6.89-6.95(m,2H),7.30-7.31(m,1H),7.35-7.42(m,2H),7.35-7.53(m,2H),7.56(d,J=2.4Hz,1H),7.79-7.86(m,1H),8.65-8.68(m,1H) <sup>1</sup> 1R(KBr)3411,2937,1683,1611,1521,1406,1230,1115,1082,1026cm <sup>-1</sup>
1-523	m.p.136-137°C HINMR(CDCl <sub>3</sub> ) & 2.25(8,311),2.29(8,311),3.12(8,311),3.20(8,311),5.18(8,211),7.11(8,111),7.14(8,111),7.23·7.51(m,1211) IR(KBr)1518,1488,1357,1263,1170,1150,1110,970,873,848,809cm <sup>-1</sup>
1-524	m.p.121-122°C 'HNMR(CDCl <sub>3</sub> ) δ 1.77(s,3H), 1.82(s,3H), 2.25(s,3H), 2.29(s,3H), 3.20(s,3H), 3.23(s,3H), 4.64(d,J=6.6Hz,2H), 5.52(t,J=6.6Hz,1H ).7.06(d,J=8.41[z,1H), 7.11(s,1H), 7.14(s,1H), 7.24(d,J=2.1Hz,1H), 7.31-7.45(m,5H) IR(KBr)1618, 1487, 1363, 1170, 1160, 1108, 970, 869, 848, 808cm <sup>-1</sup>
1-525	m.p.149-151°C 'HNMR(CDCl <sub>3</sub> ) δ 1.77(s,3H),1.83(d,J=0.6Hz,3H),2.26(s,3H),2.28(s,3H),4.62(d,J=6.9Hz,2H),4.80(s,1H),5.53(m,1H),5.72(s,1 H),6.82(dd,J=2.1,8.4Hz,1H),6.86-6.94(m,3H),6.96(d,J=2.1Hz,1H),7.10(s,1H),7.12(s,1H),7.21·7.28(m,2H) IR(KBr)3521,3395,1612,1584,1522,1490,1457,1285,1263,1242,1200,1170,1125,1014,834cm <sup>-1</sup>

Table 105

				i	)	,	)	5	)	
1-526	foam 'HNMR(C J=3.3, L.6] , IH), 7.69(	) δ 2.43 l),6.85(ε 3.7Hz,21 1597,15	(8,3H),2.70 8,1H),7.12,( H),7.78(d,J	6(s,3H),2.90(s (d,J=8.4Hz, H =8.7Hz,2H)	.,311),3.22(s,3 1),7.32(d,J=8	(J.Ch.) § 2.43(4,3H),2.76(8,3H),2.90(8,3H),3.22(8,3H),3.56(8,3H),3.3 (Hz, 1H),6.85(8,1H),7.12,(d,J=8.4Hz,1H),7.32(d,J=8.7Hz,2H),7.34~ (d,J=8.7Hz,2H),7.78(d,J=8.7Hz,2H) (1608,1597,1519,1480,1464,1176,1152,1087,972,875,817,798cm <sup>-1</sup>	(JUCha) & 2.43(a,3H),2.76(a,3H),2.90(a,3H),3.22(a,3H),3.56(a,3H),3.80(a,3H),5.30(a,2H),6.28(t,J=3.3Hz,1H),6.42(dd, Hz,1H),6.85(a,1H),7.12,(d,J=8.4Hz,1H),7.32(d,J=8.7Hz,2H),7.34~7.37(m,2H),7.39(d,J=8.7Hz,2H),7.40(d,J=1.8Hz,d,J=8.7Hz,2H),7.78(d,J=8.7Hz,2H),7.40(d,J=1.8Hz,d,J=8.7Hz,2H),7.48(a,J=8.7Hz,2Hz,2Hz,2Hz,2Hz,2Hz,2Hz,2Hz,2Hz,2Hz,2	10(8,2H),6.28(6,7,7.39(d,J=8.7F)	,J=3.3Hz,1H	),6.42(dd, 1,J=1.8Hz
1-527		) δ 2.96 (dd,J=8	(6,3H),3.21 3.4,1.8Hz,1 19,1480,14	(8,311),3.37(8, H),7.33(d,J=1	.3H),3.52(8,3 .8Hz,1H),7.3	(19Ch) § 2.96(8,3H),3.21(8,3H),3.37(8,3H),3.52(8,3H),3.77(8,3H),5.58(8,7.31,(dd,J=8.4,1.8Hz,1H),7.33(d,J=1.8Hz,1H),7.38(d,J=8.7Hz,2H),7.61(6d,J=8.1,18Hz,1H),7.33(d,J=1.8Hz,1H),7.38(d,J=8.7Hz,2H),7.61(6d,J=8.1,18Hz,1Hz,1Hz,1Hz,1Hz,1Hz,1Hz,1Hz,1Hz,1Hz,1	DCl <sub>3</sub> ) δ 2.96(8,3H),3.21(8,3H),3.37(8,3H),3.52(8,3H),3.77(8,3H),5.58(8,2H),6.84(8,1H),7.7.31,(dd,J=8.4,1.8Hz,1H),7.33(d,J=1.8Hz,1H),7.38(d,J=8.7Hz,2H),7.67(d,J=8.7Hz,2H),6.664,1609,1519,1480,1457,1176,1151,1079,970,947,876,798,748cm <sup>1</sup>	4(s, 1H),7.19(d	,J=8.4IIz,1II	),7.24~7
1.528	foam 'HNMR(C ),7.14(d,J= ,J=8.7Hz,2 IR(Nujol)1	6 2.73 2,1H),7 65(m,1]	3(8,3H),2.9× 18(brdd,J= H),7.67(d,J	4(8,3H),3.21(8 =7.8,5.1Hz,1H =8.7Hz,2H),8	,3H),3.33(t,J l),7.33(brd,J: .56(brd,J=5.	(1) (1) (2) (2) (3) (3) (3) (4) (3) (4) (3) (4) (4) (4) (4) (4) (5) (5) (4) (5) (6) (6) (7) (7) (6) (7) (7) (7) (7) (7) (7) (7) (7) (7) (7	DCl.;) & 2.73(8,3H),2.94(8,3H),3.21(8,3H),3.33(t,J=6.3Hz,2H),3.55(8,3H),3.77(8,3H),4.55(t,J=6.3Hz,2H),6.83(8,1H 8.1Hz,1H),7.18(brdd,J=7.8,5.1Hz,1H),7.33(brd,J=7.8Hz,1H),7.35(dd,J=8.1,1.8Hz,1H),7.37(d,J=1.8Hz,1H),7.38(d :H),7.65(m,1H),7.67(d,J=8.7Hz,2H),8.56(brd,J=5.1Hz,1H) 608,1593,1520,1479,1466,1177,1151,1079,970,872,816,798cm <sup>-1</sup>	(s,3H),4.55(¢,J	=6.3Hz,2H),(	3.83(s,1H H),7.38(d
1-529	m.p.203-205 $\[ \mathbb{C} \]$ HNMR(DMSO-dc) $\delta$ 2.42(s,3H),2.80(s,3H),3.45(s,3H),3.51(s,3H),3.56(s,3H),3.78(s,3H),5.36(s,2H),7.07(s,1H),7.23(s,1H),7.2 (c~7.28(m,3H),7.48,(d,J=8.7Hz,2H),7.74(d,J=8.7Hz,2H) IR(Nujol)1599,1518,1480,1466,1176,1081,1013,976,870,830,797,755cm $^{-1}$	d <sub>6</sub> ) δ 2. 7.48,(d,c.	42(s,3H),2. J=8.7Hz,2F	05°C 4SO-de) & 2.42(s,3H),2.80(s,3H),3.45(s,3H),3.3H),7.48,(d,J=8.7Hz,2H),7.74(d,J=8.7Hz,2H) 599,1518,1480,1466,1176,1081,1013,976,870	(8,3H),3.51(e 7Hz,2H) 976,870,830	05°C MSO-de) & 2.42(s,3H),2.80(s,3H),3.45(s,3H),3.51(s,3H),3.56(s,3F,3H),7.48,(d,J=8.7Hz,2H),7.74(d,J=8.7Hz,2H) 599,1518,1480,1466,1176,1081,1013,976,870,830,797,755cm <sup>-1</sup>	H),3.78(6,3H),!	5.36(8,2H),7.0°	7(s, 1H), 7.23(	B,1H),7.2
1-530	foam ¹HNMR(CD₃OD) & 3.38(s,3H),3.68(s,3H),5.41(s,2H),6.44(s,1H),6.82(dd,J=8.4,2.1Hz,1H),6.85(d,J=8.7Hz,2H),6.93(d,J=2.1H z,1H),7.06(d,J=8.4Hz,1H),7.27(m,2H),7.46(d,J=8.7Hz,2H),7.60(m,2H) IR(Nujol)3304,161,1590,1522,1488,1458,1264,1116,1074,1046,1014,942,825.745cm⁻¹	3.38 3.4Hz,11 61,1590	3(s,3H),3.68 H),7.27(m,5	8(s,3H),5.41(s 2H),7.46(d,J= 8,1458,1254,1	,2H),6.44(s,1 8.7Hz,2H),7. 115,1074,10	IH),6.82(dd,J= 60(m,2H) 46,1014,942,8	=8.4,2.1Hz,1H)	,6.85(d,J=8.7I	1z,2H),6.93(d	1,J=2.1H

Table 106

	m.p.159-162°C HINMR(DMSO-d <sub>6</sub> ) & 2.92(s,311),3.41(s,311),3.45(s,311),3.52(s,311),3.79(s,311),5.33(s,211),7.09(s,111),6.82~7.45(m,311),7.49(d
1-531	.4=9.0H2,2H),7.75(d,J=9.0Hz,2H)
	IR(Nujoi)1604,1519,1481,1469,1235,1171,1154,1085,1012,967,874,849,798cm <sup>-1</sup>
	m.p.214-216°C
	$ \text{HINMR}(\text{DMSO-d}_6) \ \delta \ 2.84(\$, 311), 3.42(\$, 311), 3.45(\$, 311), 3.52(\$, 311), 3.73(\$, 311), 3.79(\$, 311), 4.99(\$, 211), 7.08(\$, 111), 7.24(\text{d}J = 9.3H), 3.79(\$, 311), 4.99(\$,$
7:0-1	z, 111), 7.29(dd,J=9.3, 1.811z, 111), 7.30(d,J=1.811z, 111), 7.48(d,J=8.711z,211), 7.74(d,J=8.711z,211)
	IR(Nujol)1767,1606,1521,1481,1463,1216,1175,1151,1080,1013,977,946,878,821,798cm-1
	m.p.225-227°C
9	$^{\rm 1} {\rm HNMR(I)MSO-} d_{\rm d}) \ \delta \ 2.86 (s, 3H), 3.45 (s, 3H), 3.46 (s, 3H), 3.52 (s, 3H), 3.78 (s, 3H), 4.46 (s, 2H), 7.08 (s, 1H), 7.20 (d, J=8.4 Hz, 1H), 7.28 \\ {\rm d} \ 1.20 (s, 1H), 7.20 (s, 2H), 7.28 \\ {\rm d} \ 1.20 (s, 2H), 7.20 (s, 2H), 7.28 \\ {\rm d} \ 1.20 (s, 2H), 7.20 (s, 2H), 7.28 \\ {\rm d} \ 1.20 (s, 2H), 7.20 (s, 2H), 7.20 \\ {\rm d} \ 1.20 (s, 2H), 7$
1.033	-7.32(m,211),7.48(d,J=8.711z,2H),7.74(d,J=8.711z,2H)
	IR(Nujol)3340, 1677,1619,1519,1477,1463,1443,1176,1150,1088,971,871,829,794cm <sup>-1</sup>
	foam
3	"IINMR(I)MSO-d <sub>6</sub> ) $\delta$ 2.96(8,311),3.45(8,311),3.47(8,311),3.52(8,3H),3.79(8,311),4.64(8,2H),7.08(8,1H),7.18(d,J=8.411z,1H),7.31
1-534	(dd,J=8.4,1.811z,1H),7.34(d,J=1.8Hz,1H),7.48(d,J=8.7Hz,2H),7.74(d,J=8.7Hz,2H)
	IR(Nujol)3464,3362,1693,1606,1520,1481,1176,1151,1080,876,822,799cm <sup>-1</sup>
	m.p.163-165°C
	HNMR(CDCl;) 6 2.73(9,3H),3.16(8,3H),3.21(8,3H),3.55(8,3H),3.78(8,3H),4.85(ddd,J=1.5,1.5,5.4Hz,2H),5.25(8,2H),5.31,(dd
1.535	d,J=1.5,3.0,10.5,Hz,1H),5.43(ddd,J=1.5,3.0,17.1Hz,1H),6.05(ddd,J=5.4,10.5,17.1Hz,1H),6.84(s,1H),7.11(d,J=8.7Hz,1H),7.3
	4(dd,J=2.1,8.7Hz,1H),7.38(d,J=8.4Hz,2H),7.41(d,J=2.1Hz,1H),7.56(d,J=8.4Hz,2H),7.67(d,J=8.4Hz,2H),8.11(d,J=8.4Hz,2H)
	IR(KBr)1718, 1612, 1519, 1481, 1365, 1273, 1177, 1151, 1119, 1080, 1015, 969, 876cm <sup>-1</sup>

Table 107

55

50	HNMR(CDC):  11.536 Hz, 111), 7.33(d, =8.4Hz, 2H)	m.p.227-229°C "HNMR(CDCI: "HN,7,37(d,J= IR(KBr)3430,1	1-538 IH),7.30-7.55( IR(KBr)3423,1	m.p.144·146°C <sup>1</sup> HNMR(CDCl <sub>1</sub> 1-539 2H),7.15(d,J=8 Hz,2H) IR(KBr)1760,1	m.p.228-231°C HNMR(CDC);
45	; (CDCha) \$ 2.4 (CDCha) \$ 2.4 (ddd,J=1.5,3.0 7.33(d,J=8.11) 2H)	-229T; (CDCh) \$ 2.7 7(d,J=12.3Hz, 3430,1694,16	-151°C (CDCl <sub>3</sub> ) δ 2.6 7.55(m,4H),7 3423,1716,16	.146°C (CDCl <sub>11</sub> ) δ 2.5 (d,J=8.4Hz,1) 1760,1519,148	.231°C (CDCl <sub>3</sub> ) δ 2.8 4Hz,1H),7.39
40	68(s,3H),3.13 0,10.5,Hz,1H 1z,2H),7.34(d	73(s,3H),3.16( ,2H),7.41(s,1)	36(e,3H),3.13 7.38(d,J=8.4F 10,1519,1481	32(s,3H),2.69 H),7.34(dd,J=	1(a,3H),3.20(a) (d,J=8.4Hz,2
35	(s,3H),3.21(s,7),5.28(ddd,J=d,J=2.1,8.4H;	(s,3H),3.21(s,5H),7.57(d,J=1.	(s,3H),3.21(s,; Iz,2H),7.67(d,	(s,3H),3.14(s,3 :2.1,8.4Hz,1H	m.p.228-231°C ¹HNMR(CDCl³) δ 2.81(8,3H),3.20(8,3H),3.21(8,3H),3.55(8,3H ,J=2.1,8.4Hz,1H),7.39(d,J=8.4Hz,2H),7.41(d,J=2.1Hz,1H),7.4 IRKBr)1608,1521,1481,1361,1179,1148,1080,880,799cm <sup>-1</sup>
30	m.p.115-117°C <sup>1</sup> HNMR(CDCR <sub>3</sub> ) δ 2.68(s,3H),3.13(s,3H),3.21(s,3H),3.55(s,3H),3.68(s,2H),3.78(s,3H),4.61(ddd,J=1.5,1.5,5.7Hz,2H),5.17(s,2H),5.17(s,2H),5.23,(ddd,J=1.5,3.0,10.5,Hz,1H),5.28(ddd,J=1.5,3.0,16.8Hz,1H),5.29(ddd,J=5.7,10.5,16.8Hz,1H),6.84(s,1H),7.13(d,J=8.4Hz,1H),7.33(d,J=8.1Hz,2H),7.34(dd,J=2.1,8.4Hz,1H),7.38(d,J=8.4Hz,2H),7.40(d,J=2.1Hz,1H),7.42(d,J=8.1Hz,2H),7.68(d,J=8.4Hz,2H)  =8.4Hz,2H)  IR(KBr)1734.1609.1520.1481.1365,1236,1177.1161,1119,1079.970.876,797cm <sup>-1</sup>	m. p. 227-229°U; 1HNMR(CDCl <sub>3</sub> ) & 2.73(s,3H),3.16(s,3H),3.21(s,3H),3.54(s,3H),3.77(s,3H),5.26(s,2H),6.83(s,1H),7.11(d,J=12.3Hz,2H),7.32(s,1H),7.37(d,J=12.3Hz,2H),7.41(s,1H),7.57(d,J=12.3Hz,1H),7.66(d,J=12.3Hz,2H),8.13(d,J=12.3Hz,2H) 1H(KBr)3430,1694,1612,1519,1481,1365,1177,1161,1079,875,798cm <sup>-1</sup>	m.p.149-151°C !HNMR(CDCl <sub>3</sub> ) & 2.66( <sub>8</sub> ,3H),3.13(s,3H),3.21(s,3H),3.55(s,3H),3.68(s,2H),3.77(s,3H),5.17(s,2H),6.84(s,1H),7.13(d,J=8.4Hz, 1H),7.30-7.55(m,4H),7.38(d,J=8.4Hz,2H),7.67(d,J=8.4Hz,2H),7.67(m,2H) IR(KBr)3423,1716,1610,1519,1481,1365,1235,1177,1151,1119,1080,876,798cm <sup>-1</sup>	m.p.144·146°C <sup>1</sup> HNMR(CDCi.) δ 2.32(8,3H),2.69(8,3H),3.14(8,3H),3.21(8,3H),3.56(8,3H),3.78(8,3H),5.18(8,2H),6.84(8,1H),7.14(d,J=8.7Hz, <sup>2</sup> H),7.15(d,J=8.4Hz,1H),7.34(dd,J=2.1,8.4Hz,1H),7.38(d,J=8.4Hz,2H),7.40(d,J=2.1Hz,1H),7.48(d,J=8.7Hz,2H),7.67(d,J=8.4 <sup>2</sup> Hz,2H) <sup>1</sup> R(KBr)1760,1519,1481,1365,1177,1151,1119,1079,876,797cm <sup>-1</sup>	m.p.228-231°C ¹HNMR(CDCl₃)
25	,3.68(s,2H),3.7,1H),5.91(ddd, -8.4Hz,2H),7.4	3.77(s,3H),5.2 )(d,J=12.3Hz,2 '98cm <sup>-1</sup>	,3.68(8,2H),3.7 ,67(m,2H) 1080,876,798c	,3.56(s,3H),3.7 Hz,2H),7.40(d,	3.78(s,3H),5.3( (d,J=8.4Hz,2H
20	78(8,3H),4.61( J=5.7,10.5,16, 10(d,J=2.1Hz, n-1	6(s,2H),6.83(s	77(s,3H),5.17(e	/8(8,3H),5.18(	)(8,2H),6.85(8, ),7.69(d,J=8.7
15	ddd,J=1.5,1.5 8Hz,1H),6.84 1H),7.42(d,J=	,1H),7.11(d,J	s,2H),6.84(s,1	8,2H),6.84(8,1 7.48(d,J=8.7H	.1H),7.11(d,J= Hz,2H),8.28(c
10	,5.7Hz,2H),5.1 (8,1H),7.13(d,	=12.3Hz,2H),7	H),7.13(d,J=8.	H), 7.14(d, J=8. [2,2H), 7.67(d, J	:8.4Hz,1H),7.3 I,J=8.7Hz,2H)
5	7(8,2 =8.4 3(d,J	.32(8	4Hz,	7Hz, =8.4	2(dd

Table 108

	m.p.153-156°C
	$^{4} \text{HINMIR} (\text{CDCA}) \ \delta  1.53 (\text{s,9H}), 2.69 (\text{s,3H}), 3.15 (\text{s,3H}), 3.21 (\text{s,3H}), 3.55 (\text{s,3H}), 3.78 (\text{s,3H}), 5.19 (\text{s,2H}), 6.84 (\text{s,1H}), 7.10 (\text{dd,J=7.5,7.}) \ \delta  1.53 (\text{s,2H}), 6.84 $
1-541	5112,111),7.17(d,J=7.511z,1H),7.23(d,J=8.411z,1H),7.26(dd,J=7.5,7.5Hz,1H),7.33(d,J=7.5Hz,1H),7.37(dd,J=2.1,8.4Hz,1H),7.
	38(d,J=8.411z,2H),7.40(d,J=2.111z,1H),7.67(d,J=8.411z,2H)
	IR(KBr)3405,1724,1519,1480,1366,1236,1177,1153,1080,970,875,798cm <sup>-1</sup>
	m.p.178-182°C
35	111NMR(CDCL <sub>3</sub> ) & 2.70(8,3H),3.15(8,3H),3.21(8,3H),3.55(8,3H),3.78(8,3H),5.14(8,2H),6.76(m,2H),6.84(8,1H),7.19(m,2H),7.26
7.0-1	(d,J=8.7112,111),7.37(d,J=2.711z,111),7.36(dd,J=2.7,8.711z,111),7.38(d,J=8.7Hz,2H),7.68(d,J=8.7Hz,2H)
	IR(KBr)3448,1627,1608,1519,1497,1364,1177,1151,1079,971,876,798cm <sup>-1</sup>
	m.p.187·189°C
3	1HNMR(CDCl <sub>3</sub> ) δ 2.38(s,311),3.39(s,3H),3.45(s,3H),5.11-5.14(m,3H),5.89(s,1H),6.33(s,1H),6.88-6.94(m,2H),7.20-7.36(m,6H
1.543	),7.43(d,J=2.1Hz,HI),7.76(d,J=0.6Hz,H)
	IR(KBr)3414,2942,1613,1534,1469,1355,1266,1172,1092,1030cm <sup>-1</sup>
	m.p.207.215°C(dec.)
7	1HINMIR(d6-DIMSO) & 2.37(s,3H),3.67(brs,2H),4.56(brs,2H),4.90(s,2H),6.14.6.20(m,2H),6.86(d,J=8.7Hz,2H),7.11.7.22(m,4H
1-044	),7.42(d,J=8.711z,2H),7.52(s,1H),8.94(s,1H),9.47(s,1H)
	IR(KBr)3388,3301,2932,1612,1591,1521,1458,1413,1288,1030cm <sup>-1</sup>
	m.p.108-110°C
	$^{11} \text{IINMR}(\text{CDCl}_3) \ \delta  1.69(\text{s},3\text{H}), 1.74(\text{s},3\text{H}), 249-2.69(\text{m},2\text{H}), 3.03(\text{s},3\text{H}), 3.20(\text{s},3\text{H}), 3.66(\text{s},3\text{H}), 3.76(\text{s},3\text{H}), 4.06(\text{t},3\text{=}6.61\text{Iz},2\text{H}), 4. \ \text{o}  o$
1.545	$93(8,2H), 5.22(m,1H), 6.66(8,1H), 7.04(d,J=8.7Hz,1H), 7.09\cdot 7.17(m,2H), 7.37(dd,J=2.1,8.7Hz,1H), 7.44(d,J=2.1Hz,1H), 7.51\cdot 7.5$
	8(m,2H)
	IR(KBr)3434,2933,1604,1521,1473,1383,1360,1278,1160,1121,1084,1017cm <sup>-1</sup>

Table 109

1.546	m.p.109-110°C HINMR(CDCl <sub>3</sub> ) & 1.69(s,3H),1.75(s,3H),248-2.58(m,2H),4.07(t,J=6.6Hz,2H),5.22(m,1H),5.69(s,1H),5.87(s,1H),6.44(s,1H),6. 93-6.95(m,2H),7.04-7.06(m,1H),7.10-7.18(m,2H),7.58-7.64(m,2H) IR(KB <sub>1</sub> )3411,2932,1608,1587,1522,1491,1226,1111,1074,1017cm <sup>-1</sup>
1-547	
1-548	m.p.133-136°C <sup>1</sup> HNMR(CDCl <sub>3</sub> ) δ 2.98(s,3H),3.12(s,3H),3.56(s,3H),3.75(s,3H),4.94(s,2H),5.18(s,2H),6.67(s,1H),7.09-7.17(m,3H),7.34-7.49( m,7H),7.51-7.58(m,2H) <sup>1</sup> IR(KBr)3434,2941,1598,1519,1481,1383,1365,1279,1231,1164,1099,1081cm <sup>-1</sup>
1.549	m.p.161·162°C IIINMR(CDCl <sub>3</sub> )
1.550	m.p.113-115°C IHNMR(CDCl <sub>3</sub> )

Table 110

1-551	m.p.138-140°C HINMR(CDC)3, 5 2.38(s,3H),3.04(s,3H),3.57(s,3H),3.74(s,3H),4.90(s,2H),5.11(s,2H),5.63(s,1H),6.66(s,1H),6.91(dd,J=2.1,8. 4Hz,1H),6.99(d,J=8.4Hz,1H),7.05(d,J=1.8Hz,1H),7.08-7.17(m,2H),7.22(d,J=7.8Hz,2H),7.33(d,J=7.8Hz,2H),7.52·7.59(m,2H))
	11(1).01(10,2001,1001,1010,1110,1101,1110,1101,1110,1101,1110,110,1
1-552	m.p.188-190°C IIINMR(CDCh) & 2.38(s,3H),3.10(s,3H),3.42(s,3H),3.75(s,3H),5.12(s,2H),6.04(s,1H),6.43(s,1H),7.11-7.25(m,5H),7.35(d,J=7.8Hz,2H),7.42(dd,J=2.4,8.7Hz,1H),7.51(d,J=2.4Hz,1H),7.57-7.65(m,2H) IR(KBr)3433,2963,1611,1523,1485,1355,1282,1226,1163,1106,1071cm <sup>-1</sup>
	m.p.149-150°C 1HNMR(CDCl <sub>3</sub> ) & 3.13(8,3H),3.21(8,3H),5.20(8,2H),7.17(d,J=8.4Hz,1H),7.24(m,1H),7.36-7.54(m,9H),7.58(dd,J=1.2,2.4Hz,1
1-553	H),7.60-7.67(m,2H) IR(KBr)1524,1485,1354,1292,1263,1181,1150,1114,977,869,858.850,812,796 cm <sup>-1</sup>
1.554	m.p.92-93°C IIINMR(CDCh;) \$1.69(e,3H),1.74(d,J=1.2Hz,3H),2.26(e,3H),2.28(e,3H),2.66(dt,J=6.6,7.2Hz,2H),3.20(e,3H),3.21(e,3H),4.07( t,J=7.2Hz,2H),5.22(m,1H),7.05(d,J=8.4Hz,1H),7.11(e,1H),7.13(e,1H),7.25(dd,J=2.1,8.4Hz,1H),7.31-7.43(m,5H) IR(KBr)1518,1488,1355,1293,1264,1169,1151,1109,970,872,818cm <sup>-1</sup>
1.555	m.p.126-127°C  HNMR(CDCl <sub>3</sub> ) δ 1.77(s,3H),1.82(s,3H),3.20(s,3H),3.23(s,3H),4.65(d,J=6.6Hz,2H),5.50(m,1H),7.10(d,J=8.7Hz,1H),7.18-7.2  7(m,2H),7.36-7.43(m,2H),7.50(dd,J=1.5,8.7Hz,1H),7.55(d,J=1.5Hz,1H),7.60-7.66(m,2H)  1R(KB))1527,1489,1359,1295,1266,1177,1153,1118,974,894,874cm <sup>-1</sup>

Table 111

										(
1.556	m.p.154-155 \$\Colon \text{innp.154-155 \$\Colon \text{innmr(CDCl3)} \hat{\text{7.31-7.43(m,711)}} \text{IR(KBr)1520,148}	m.p.154-155°C HINMR(CDCh.) & 2.25(s, 3H), 2.28(s, 3H), 2.38(s, 3H), 3.11(s, 3H), 3.20(s, 3H), 5.13(s, 2H), 7.11(s, 1H), 7.14(s, 1H), 7.19-7.28(m, 4H), 7.31-7.43(m, 7H) 7.31-7.43(m, 7H) IR(KBr)1520, 1487, 1365, 1284, 1260, 1192, 1172, 1152, 1108, 967, 867, 809, 795cm <sup>1</sup>	s,311),2.38(	(s,3H),3.11(s,	,311),3.20(s,311) 967,867,809,79	,5.13(s,2H),7.11 5cm <sup>1</sup>	(8, 111), 7.14(8	,1H),7.19-7.2	28(m,4H),	
1.557	m.p.112-113°C HINMR(CDCLs) ( m,111),5.71(s,111) IR(KBr)3380.161	m.p.112-113°C 4HNMR(CDCE) & 1.69(s,3H),1.76(s,3H),2.26(s,3H),2.27(s,3H),2.54(dt,J=7.2,6.9Hz,2H),4.07(t,J=6.9Hz,2H),4.86(s,1H),5.23( m,1H),5.71(s,1H),6.82(dd,J=2.1,8.4Hz,1H),6.85-6.93(m,3H),6.96(d,J=2.1Hz,1H),7.10(s,1H),7.12(s,1H),7.22-7.27(m,2H) HR(KBr)3380.1613,1586,1523,1490,1471,1431,1391,1293,1261,1246,1205,1171,1130,836cm <sup>-1</sup>	(8,3H),2.26 1Hz,1H),6.4 ),1471,143	(s,311),2.27(s 85-6.93(m,31 1,1391,1293,	,3H),2.54(dt,J= l),6.96(d,J=2.1. 1261,1246,120	7.2,6.9Hz,2H),4 Hz,1H),7.10(s,1 5,1171,1130,836	1.07(t,J=6.9H H),7.12(a,1H)	z,2H),4.86(s,	1H),6.23(	
1.558	m.p.141-142°C HNMR(CDCL <sub>3</sub> ) ( .4,1.8Hz,1H),7.14 IR(KBr)3429,161	m.p.141-142℃ !HNMR(CIDCl <sub>3</sub> )	(s,3H),4.63 -7.51(m,2H),1467,1449	(d,J=6.9Hz,2 l) 9,1401,1259,	(H),5.06(s,1H), <sup>4</sup>	.,52(m,1H),5.75 ,835,781cm <sup>-1</sup>	(e,1H),6.89-6	.97(m,3H),7.	07(dt,J=8	
1-659	m.p.179-180℃ IIINMR(CDCla) ( H),6.98(d,J=8.4H IR(RB)3317,160	m.p.179·180°C HINMR(CDCh) & 2.26(6,311),2.28(8,311),2.39(8,311),4.81(8,111),5.11(8,211),5.70(8,111),6.83(dd,J=2.1,8.4Hz,111),6.86·6.91(m,2 H),6.98(d,J=8.4Hz,111),6.98(d,J=2.1Hz,111),7.10(8,111),7.12(8,111),7.21·7.28(m,411),7.32·7.38(m,211) IR(KBr)3317,1609,1520,1489,1426,1378,1247,1206,1175,1124,1006,792cm <sup>-1</sup>	(s,3H),2.39( 1Hz,1H),7. 3,1378,124'	(s,3H),4.81(s, .10(s,1H),7.1 7,1206,1175,	2(6,1H),5.11(6,2H) 2(6,1H),7.21.7. 1124,1006,792.	,5.70(s,1H),6.83 28(m,4H),7.32-7 :m <sup>-1</sup>	1.38(m,2H)	1Hz, 1H), 6.86	.6.91(m,2	
1.560	foam 'HNMR(DMSO-c, 'J=8.0Hz,1H),7.2 IR(KBr)3257,155	foam :HNMR(DMSO-d <sub>6</sub> )	.75(8,3H),4 .8Hz,1H),7 3,1382,120	.62(d,J=5.0F .32-7.52(m,8 7,1035,764,7	1z,2H),5.02(t,J: H),7.57(d,J=2.	-6.0Hz,1H),6.19 4Hz,1H),9.91(bı	(8,2H),6.94(8 re,1H)	,1H),6.99(e,1	(H),7.06(d	

Table 112

	m.p.147.148°C
	$ \text{HINMR}(\text{CDCL}_3) \ \delta \ 3.27 (8,311), 3.79 (8,311), 3.82 (8,311), 5.26 (8,211), 6.92 (8,111), 6.95 (8,111), 7.13 (4,J=8.7Hz,1H), 7.35-7.50 (m,8H), 7.13 (1,J=8.7Hz,1H), 7.35-7.50 (m,8Hz,1H), 7.35-7.50 (m,8Hz,1H)$
1991	80(dd,J=8.7,2.7Hz,1H),8.05(d,J=2.7Hz,1H),10.62(s,1H)
	IR(KBr) 1682, 1606, 1489, 1377, 1345, 1261, 1209, 1168, 1119, 1038, 871, 832cm · t
	m.p.189-191°C
	111NMIR(1)MSO-da) & 3.53(8,311),3.80(8,311),3.80(8,311),5.27(8,211),7.05(8,111),7.10(8,111),7.25(d,J=8.7Hz,111),7.30-7.59(m,7)
1-562	11),7.66(dd,J=11.7,2.111z,111),7.67(dd,J=8.7,2.311z,111),7.84(d,J=2.311z,111),12.7(brs,111)
	IR(KBr)3433,1705,1492,1371,1250,1207,1168,1033,868cm <sup>1</sup>
	m.p.204-207°C
	$^{1}\text{HNMR}(\text{CDCl}_3)  \delta  1.36 (s, 9H), 3.20 (s, 3H), 3.41 (s, 3H), 3.74 (s, 3H), 5.15 (s, 2H), 5.65 (s, 1H), 5.77 (s, 1H), 6.80 (s, 1H), 6.83 (dd, J=8.4, 2.1) (s, 2H), 5.45 (s, 2H), 5.83 (dd, 3H), 5.83 (dd, 3H)$
1.563	$0Hz_1H$ ), $6.96(d, J=2.0Hz, 1H$ ), $6.98(d, J=8.4Hz, 1H$ ), $7.34\cdot 7.45(m, 7H$ ), $7.68(d, J=8.7Hz, 2H$ )
	IR(KBr)3408,3337,1692,1498,1474,1466,1347,1251,1150,870,855cm <sup>-1</sup>
	m.p.179-182°C
	111NMIR(1)MSO-d <sub>6</sub> ) \$\delta\$ 3.76(8,311),3.76(8,311),5.26(8,211),6.99(8,111),7.00(t,J=8.7Hz,1H),7.01(8,1H),7.22(ddd,J=8.7,2.4Hz,J=1.
1-564	2Hz,1H),7.24(d,J=8.9Hz,1H),7.32-7.54(m,6H),7.65(dd,J=8.9,2.4Hz,1H),7.82(d,J=2.4Hz,1H),9.91(e,1H),12.6(brs,1H)
	IR(KBr)3422,3277,1726,1526,1491,1416,1396,1284,1210,1031cm <sup>-1</sup>
	m.p.178·180°C
E C	$^{\rm 1} {\rm HNMR}({\rm DMSO}\cdot {\rm d_{0}}) \ \delta \ 3.30 (\rm s, 3H), 3.43 (\rm s, 3H), 3.61 (\rm s, 3H), 4.31 (\rm s, 2H), 6.14 (\rm s, 2H), 6.25 (\rm s, 1H), 6.61 (\rm dd, J=8.4, 1.9Hz, 1H), 7.05 (\rm d, J=9.4, 1H), 7$
1-565	.4Hz,1H),7.33-7.44(m,6H),7.50-7.54(m,2H),7.70(d,J=8.7Hz,2H),9.08(s,1H)
	1R(KBr)3435,3378,1593,1518,1481,1360,1245,1147,1119,1010,871cm <sup>-1</sup>

Table 113

1-566	foam HINMR(DMSO-dc) & 3.27(8,311),3.59(8,311),4.21(8,211),5.13(8,211),6.17(8,111),6.60(dd,J=8.3,1.411z,111),6.70(d,J=1.4Hz,111),6. 82(d,J=8.411z,211),7.03(d,J=8.3Hz,111),7.33-7.53(m,711),9.07(brs,111),9.45(brs,111) IR(KBr)33390,1609,1592,1484,1247,1227,1119,1011,812cm <sup>-1</sup>
1.567	m.p.146-148°C HINMR(DMSO.da) & 1.64(8,3H),1.70(8,3H),2.44(q,d=6.9Hz,2H),3.53(8,3H),3.78(8,3H),3.80(8,3H),4.05(t,d=6.9Hz,2H),5.26(t,d=6.9Hz,2H),7.05(s,HI),7.10(s,HI),7.19(d,d=8.4Hz,1H),7.50(dd,d=8.4,2.0Hz,1H),7.57(t,d=8.3Hz,1H),7.65(ddd,d=11.9,1.9Hz,1H),7.79(d,d=2.0Hz,1H),12.5(brs,1H)  Hz,1H),7.66(dd,d=11.9,1.9Hz,1H),7.79(d,d=2.0Hz,1H),12.5(brs,1H)  IR(KBr)3434,3299,1727,1489,1375,1341,1209,1172,1033,851,824cm <sup>-1</sup>
1-568	m.p.179-181°C <sup>1</sup> HNMR(CDCl <sub>3</sub> ) δ 1.31(s,9H),3.11(s,3H),3.20(s,3H),3.39(s,3H),3.74(s,3H),5.16(s,2H),5.98(s,1H),6.79(s,1H),7.09(d,J=8.5Hz,1H),7.29(dd,J=8.5,1.9Hz,1H),7.35-7.49(m,8H),7.66(d,J=8.7Hz,2H) <sup>1</sup> HN,7.29(dd,J=8.5,1.9Hz,1H),7.35-7.49(m,8H),7.66(d,J=8.7Hz,2H) <sup>1</sup> IR(KBr)3404,3341,1690,1617,1465,1369,1348,1174,1151,869,814cm <sup>1</sup>
I-569	m.p.189·191°C !HNMR(DMSO·d <sub>6</sub> )
1-570	m.p.194·196°C !HNMR(CDCl <sub>3</sub> ) δ 3.07(s,3H),3.22(s,3H),3.36(s,3H),3.77(s,3H),5.16(s,2H),6.92(s,1H),7.13(d,J=8.6Hz,1H),7.25(dd,J=8.6,2.1 Hz,1H),7.29(d,J=2.1Hz,1H),7.36·7.47(m,7H),7.63(brs,1H),7.67(d,J=8.4Hz,2H) IR(KBr)3433,3329,1737,1518,1476,1369,1168,1148,878cm <sup>-1</sup>

Table 114

1-571	m.p. 184-186°C HINMR(CDCL <sub>3</sub> ) & 2.31(s,311),2.38(s,311),3.12(s,311),3.45(s,311),3.58(s,311),3.76(s,311),5.14(s,211),6.95(s,111),7.11-7.23(m,5H), 7.34-7.37(m,4H),7.57(dd,J=8.7,2.4Hz,1H),7.66(d,J=2.4Hz,1H) 1R(CHCl <sub>3</sub> )2952,1732,1614,1599,1518,1467,1445,1370,1290,1256,1169,1117,1081,1064,1003,973,905,827cm <sup>-1</sup>
1.572	m.p.218-220°C HNMR(CDCh) & 2.38(8,3H),3.12(8,3H),3.44(8,3H),3.63(8,3H),5.14(8,3H),5.14(8,2H),6.80-6.83(m,2H),6.94(8, 1H),7.14(4,J=8.7Hz,1H),7.21-7.23(m,4H),7.35-7.37(m,2H),7.56(dd,J=8.7,2.4Hz,1H),7.66(d,J=2.4Hz,1H) IR(CHCh)33596,2939,1720,1613,1522,1466,1445,1370,1346,1291,1258,1183,1172,1116,1081,1064,1003,973,904,866,837cm
1-573	m.p.197-199°C'HNMR(CD <sub>3</sub> OD)
1.574	m.p.151-153°C'IINMR(CDCh) & 2.39(e,3H),3.44(e,3H),3.64(e,3H),5.74(e,3H),5.12(e,2H),5.78(br,2H),6.78-6.81(m,2H),6.94(e,3H),6.96(d,J=8.4Hz,1H),7.15-7.25(m,6H),7.33-7.36(m,2H) IR(CHCh)3595,3541,2952,1730,1612,1591,1521,1474,1395,1345,1323,1290,1258,1173,1129,1081,1063,1004,901,863,836c m '
1.575	m.p.195-196°C 1HNMR(CD <sub>3</sub> OD) δ 2.34(a,3H),3.40(a,3H),5.15(a,2H),6.75-6.78(m,2H),6.96(a,1H),7.02(a,1H),7.14-7.21(m,6H),7.3 1-575 6-7.39(m,2H) 1R(KBr)3530,3398,2942,1708,1610,1593,1520,1465,1373,1334,1256,1233,1127,1078,1056,996,960,864,834,791,755,690,665 1,605,534cm <sup>-1</sup>

Table 115

	m.p.82-84°C								
576	"HNMR(CDCla)	$HNMR(\mathrm{CDCA_3}) \circ 1.70 (\mathbf{s}, 311), 1.75 (\mathbf{s}, 311), 2.54 \cdot 2.59 (\mathbf{m}, 211), 3.24 (\mathbf{s}, 311), 3.50 (\mathbf{s}, 311), 3.77 (\mathbf{s}, 311), 4.10 (\mathbf{t}, J = 6.9 Hz, 211), 5.23 (\mathbf{m}, 111), 7.10 (\mathbf{s}, 311), 1.75 (\mathbf{s}, 311), 1.75 (\mathbf{s}, 311), 2.54 \cdot 2.59 (\mathbf{m}, 211), 3.24 (\mathbf{s}, 311), 3.54 (\mathbf{s}, 311), 3.74 (\mathbf{s}, 311),$	5(s,3H),2.54	2.59(m,2H),	3.24(s,3H),3.50	(8,3H),3.77(s,3	H),4.10(t,J=6	.9Hz,2H),5.23	3(m, 1H),7
·	.07-7.12(m,4H), 1R(CHCl <sub>3</sub> )2936,	.07-7.12(m,4H),7.23-7.28(m,2H),7.57(dd,J=8.7,2.4Hz,1H),7.63(d,J=2.4Hz,1H),9.99(s,1H)	7.57(dd,J=8. 1518,1469,14	7,2.4Hz, 1H)	,7.63(d,J=2.4H; 31,1294,1232,13	z,1H),9.99(s,1H 172,1159,1123,	l) 1093, 100 <b>6,</b> 96	14cm 1	:
	m.p.126-128°C	-							
	HINMR(CD3OD	HINMR(CD3OD) & 1.70(8,3H), 1.74(d,J=0.9Hz,3H),2.53-2.61(m,2H),3.25(8,3H),3.44(8,3H),3.75(8,3H),4.13(t,J=6.3Hz,2H),5.	.74(d,J=0.9H	z,3H),2.53-5	2.61(m,2H),3.25	6(8,3H),3.44(8,3	H),3.75(8,3H)	,4.13(t,J=6.3l	Hz,2H),5.
577	29(m, 1H),7.04-7	29(m,111),7.04.7.11(m,311),7.24(d,J=8.711z,111),7.33.7.38(m,211),7.58.7.65(m,211)	1,J=8.711z, 11	1),7.33-7.38(	m,211),7.58-7.6	5(m,2H)			
	IR(KBr)3432,29	IR(KBr)3432,2940,2566,1735,1711,1646,1613,1519,1470,1447,1366,1297,1264,1228,1172,1118,1081,1063,1001,962,920,8	11,1646,161	3,1519,1470	,1447,1366,129	7,1264,1228,1	172,1118,108	1,1063,1001,9	962,920,8
	98,871,828,796,695,524cm	695,524cm <sup>-1</sup>					:		i
	m.p.202-204°C				F				
064	HNMR(CDCl3)	$^{1}\text{HNMR}(\text{CDC} _{3}) \ \delta \ 3.13(\text{s}, 3\text{H}), 3.45(\text{s}, 3\text{H}), 3.61(\text{s}, 3\text{H}), 3.76(\text{s}, 3\text{H}), 5.19(\text{s}, 2\text{H}), 6.95(\text{s}, 1\text{H}), 7.06-7.11(\text{m}, 2\text{H}), 7.14(\text{d}, J=8.7\text{Hz}, 1\text{H}), 7.14(\text{d}, J=8.7\text{Hz}, I), 7.14(d$	5(s,3H),3.61(	s,3H),3.76(s	,3H),5.19(s,2H)	,6.95(s, 1H),7.0	5-7.11(m,2H)	,7.14(d,J=8.7I	Hz, 1H),7.
0/0	30-7.49(m,7H),7	30-7.49(m,7H),7.57(dd,J=8.7,2.4Hz,1H),7.67(d,J=2.4Hz,1H)	Hz, 1H), 7.67(	1,J=2.4Hz,1	H)				
	IR(CHCl <sub>3</sub> )2952,	IR(CHCI <sub>3</sub> )2952,1731,1603,1519,1472,1445,1371,1345,1291,1172,1159,1117,1081,1064,1004,972,960,904cm <sup>-1</sup>	1472,1445,13	71,1345,120	11,1172,1159,11	117,1081,1064,	1004,972,960	,904cm <sup>1</sup>	
	m.p.197-199°C								
2	HNMR(CDCl <sub>3</sub> )	$HNMR(CDCl_3) \ \delta \ 2.71(s,3H), 3.56, (s,3H), 3.75(s,3H), 5.18(s,2H), 6.72, (s,1H), 6.86(s,1H), 7.00(d,J=8.4Hz1H), 7.12-7.18(m,3H), 7.12-7.18$	3,(s,3H),3.75(	(s,3H),5.18(£	1,2H),5.72,(8,1H	l),6.86(s, 1H),7.0	00(d,J=8.4Hz	1H),7.12-7.18	(m,3H),7
	.24(d,J=2.111z,11	24(d,J=2.111z,1H),7.38-7.46(m,7H)	H)						
	IR(CHCl <sub>3</sub> )3543,5	$IR(CHCl_3)3543,2939,1602,1521,1482,1465,1394,1370,1328,1254,1178,1159,1130,1081,1005,964,840,816cm^{-1}$	1482, 1465, 13	94,1370,132	8,1254,1178,11	169,1130,1081,	1005,964,840,	,816cm <sup>-1</sup>	
	m.p.199-201℃								
	HNMR(CD3OD)	$!HNMR(CD_{3}OD) \ \delta \ \ 3.40(s,3H), 3.73(s,6H), 5.22(s,2H), 7.00(s,1H), 7.03-7.11(m,4H), 7.17(m,1H), 7.31-7.41(m,5H), 7.49-7.52(m,2H), 7.11(m,2H), 7.11(m,2H), 7.31-7.41(m,2H), 7.49-7.52(m,2H), 7.11(m,2H), 7.11(m,2H), 7.31-7.41(m,2H), 7.49-7.52(m,2H), 7.11(m,2H), 7.11($	73(s,6H),5.22	(8,2H),7.00(	s, 1H), 7.03-7.11	(m,4H),7.17(m,	,1H),7.31-7.4	1(m,5H),7.49-	7.52(m,2
280	H)								
	IR(KBr)3527,34;	IR(KBr)3527,3434,2940,1701,1591,1518,1465,1380,1335,1320,1291,1270,1222,1161,1130,1078,1056,1002,916,868,837,74	91,1518,146	,1380,1335,	1320,1291,127	0,1222,1161,11	30,1078,1056	3,1002,916,86	8,837,74
	7,698,633,599,526,480cm <sup>-1</sup>	26,480cm <sup>-1</sup>	<i>;</i>						

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Table 116

1.581 (11) 1.281 7.28 11R(C 11) 11R(C	m.p.122-123°C HINMR(CDCl <sub>3</sub> ) & 1.78(s,3H),1.82(s,3H),3.25(s,3H),3.50(s,3H),3.76(s,3H),4.66(d,J=6.9Hz,2H),5.52(m,1H),7.09-7.14(m,4H), 7.23-7.27(m,2H),7.56(dd,J=8.7,2.1Hz,1H),7.63(d,J=2.1Hz,1H),9.99(s,1H), IR(CHCl <sub>3</sub> )2938,1679,1604,1591,1517,1469,1445,1371,1331,1292,1172,1159,1122,1092,1004,973cm <sup>-1</sup> m.p.158-159°C HINMR(CDCl <sub>3</sub> ) & 2.69(s,3H),3.13(s,3H),3.57(s,3H),7.76(s,3H),5.19(s,2H),6.85(s,1H),7.13-7.18(m,3H),7.37-7.49(m,7H),7.56( dd,J=9.0,2.1Hz,1H),7.62(d,J=2.1Hz,1H) IRCCHCl <sub>3</sub> )2939,1603,1521,1482,1464,1294,1253,1177,1119,1082,1003,963,876,842cm <sup>-1</sup>
	NMR(CDCl <sub>3</sub> ) & 1.78(a,3H),1.82(a,3H),3.25(a,3H),3.50(a,3H),3.76(a,3H),4.66(d,J=6.9Hz,2H),5.52(m,1H),7.09-7.14(m,4H), 23-7.27(m,2H),7.56(dd,J=8.7,2.1Hz,1H),7.63(d,J=2.1Hz,1H),9.99(s,1H)  (CHCl <sub>3</sub> )2938,1679,1604,1591,1517,1469,1445,1371,1331,1292,1172,1159,1122,1092,1004,973cm <sup>-1</sup> p.158-159°C  NMR(CDCl <sub>3</sub> ) & 2.69(a,3H),3.13(a,3H),3.57(a,3H),3.76(a,3H),5.19(a,2H),6.85(a,1H),7.13-7.18(m,3H),7.37-7.49(m,7H),7.56( 3.59.0,2.1Hz,1H),7.62(d,J=2.1Hz,1H)  (CHCl <sub>3</sub> )2939,1603,1521,1482,1464,1294,1253,1177,1119,1082,1003,963,876,842cm <sup>-1</sup>
·	13-7.27(m,2H),7.56(dd,J=8.7,2.1Hz,1H),7.63(d,J=2.1Hz,1H),9.99(s,1H) (CHICl <sub>3</sub> )2938,1679,1604,1591,1517,1469,1445,1371,1331,1292,1172,1169,1122,1092,1004,973cm <sup>-1</sup> p. 158-159°C NMR(CDCl <sub>3</sub> )δ 2.69(s,3H),3.13(s,3H),3.57(s,3H),7.76(s,3H),5.19(s,2H),6.85(s,1H),7.13-7.18(m,3H),7.37-7.49(m,7H),7.56(s,1Hz,1H),7.62(d,J=2.1Hz,1H) (CHICl <sub>3</sub> )2939,1603,1521,1482,1464,1253,1177,1119,1082,1003,963,876,842cm <sup>-1</sup>
	,J=9.0,2.111z,111),7.62(d,J=2.111z,111) (CHChh293939.1603.1521.1482.1464,1253,1177,1119,1082,1003,963,876,842cm <sup>-1</sup>
IR(	/CHCH-2939_1603_1521_1482_1464_1294_1253_1177_1119_1082_1003_963_876_842cm <sup>-1</sup>
d:u —	m.p.145-147°C
	.HNMR(CDCl <sub>3</sub> ) & 2.68(8,3H),3.54(8,3H),3.56(8,3H),3.75(8,3H),5.21(8,2H),5.27(8,2H),6.85(8,1H),7.00(d,J=8.7Hz,1H),7.13·7.
1.583 23(1	23(m,3H),7.33-7.49(m,8H)
IRG	IR(CHCh)2938,1731,1603,1520,1482,1370,1249,1178,1158,1134,1081,1004,961,840,815cm <sup>1</sup>
d.m.	m.p.160-162°C
	$\text{HNMR}(\text{CDCI}_3) \ \delta \ 3.47 (\text{s}, 3\text{H}), 3.74 (\text{s}, 3\text{H}), 5.18 (\text{s}, 2\text{H}), 5.72 (\text{s}, 1\text{H}), 6.00 (\text{s}, 1\text{H}), 6.46 (\text{s}, 1\text{H}), 7.01 (\text{d}, J=8.4\text{Hz}, 1\text{H}), 7.10 \cdot 7.19 (\text{m}, 3\text{H}), 7.10 \cdot 1.10 \cdot$
1.584 27(0	27(d,J=2.1Hz,1H),7.36-7.48(m,7H)
IR(	IR(CHCI3)3540,2938,1603,1568,1522,1490,1464,1416,1396,1325,1263,1158,1111,1072,1002,838cm <sup>-1</sup>
m.p	m.p.133-134°C
YH,	$\text{HNMR}(\text{CD}_3\text{OD}) \ \delta  1.80 (\text{d,J} = 0.9 \text{Hz,3H}), 1.82 (\text{d,J} = 0.9 \text{Hz,3H}), 3.26 (\text{s,3H}), 3.44 (\text{s,3H}), 3.76 (\text{s,3H}), 4.71 (\text{d,J} = 6.9 \text{Hz,2H}), 5.55 (\text{m,1}) \ \text{Hermitian} \ $
1.585 H),7	H),7.06-7.12(m,3H),7.26(d,J=8.7Hz,1H),7.34-7.36(m,2H),7.58-7.63(m,2H)
IR(	$\Pi(\mathrm{KBr})3422,2939,1736,1702,1603,1519,1472,1368,1293,1228,1187,1173,1117,1081,1061,1003,975,961,920,827,759,701,5$
230	23cm <sup>-1</sup>

Table 117

1.586	m.p. 152-153°C 'HNMR(CDCla) \( \begin{array}{l} \) 1.69(s, 3H), 1.74(d, J=0.9Hz, 3H), 2.55-2.57(m, 2H), 3.23(s, 3H), 3.44(s, 3H), 3.60(s, 3H), 3.77(s, 3H), 4.09(t, J=6.6]  Hz, 2H), 5.22(m, 1H), 6.95(s, 1H), 7.05-7.11(m, 3H), 7.30-7.35(m, 2H), 7.57(dd, J=8.7, 2:4Hz, 1H), 7.64(d, J=2.4Hz, 1H)  HR(CHCla) 2938, 1731, 1601, 1519, 1469, 1445, 1370, 1345, 1291, 1172, 1169, 1172, 1081, 1064, 1004, 973, 904, 864, 840cm   1
1.587	m.p.132-133°C <sup>1</sup> HINMR(CDCL <sub>3</sub> ) 6 3.44(a,3H),3.61(a,3H),3.75(a,3H),5.18(a,2H),5.71(a,1H),6.95(a,1H),6.99-7.10(m,3H),7.17(dd,J=8.4,2.1Hz,1 <sup>1</sup> H),7.25-7.47(m,8H) <sup>1</sup> H(CHCl3)3542,2952,2938,1731,1597,1519,1474,1392,1345,1321,1290,1266,1169,1130,1080,1063,1000,900,862,839cm <sup>-1</sup>
1-588	m.p.92-94°C  'HNMR(CDCl <sub>3</sub> ) & 1.69(d,J=0.6Hz,3H),1.76(d,J=1.2Hz,3H),2.51-2.58(m,2H),3.45(e,3H),3.75(e,3H),4.09(t,J=6.9Hz,2H),5.23( m,1H),5.70(br,1H),6.92(d,J=8.4Hz,1H),6.97(s,1H),7.05-7.10(m,2H),7.16(dd,J=8.4,2.1Hz,1H),7.23(d,J=2.1Hz,1H),7.33-7.38( m,2H)  IR(KBr)3534,3432,2936,1713,1597,1519,1473,1377,1322,1260,1231,1158,1130,1081,1063,1004,961,919,837,808,791,764,7  05,521cm <sup>-1</sup>
-689	m.p.120-122°C HINMR(CDCh <sub>3</sub> ) δ 1.69(s, 3H), 1.76(s, 3H), 2.51-2.58(m, 2H), 3.44(s, 3H), 3.61(s, 3H), 3.75(s, 3H), 4.09(t, J=6.6Hz, 2H), 5.23(m, 1H), 5.73(s, 1H), 6.92(d, J=8.4Hz, 1H), 6.96(s, 1H), 7.04-7.10(m, 2H), 7.16(dd, J=8.1, 1.8Hz, 1H), 7.23(d, J=1.8Hz, 1H), 7.31-7.36(m, 2H) IR(CHCl <sub>3</sub> )3541, 2937, 1731, 1598, 1519, 1471, 1391, 1345, 1323, 1290, 1265, 1159, 1130, 1080, 1063, 1005, 839cm <sup>-1</sup>
.590	m.p.154-156°C !HNMR(CDCl <sub>3</sub> ) & 1.77(s,3H),1.82(s,3H),3.24(s,3H),3.45(s,3H),3.61(s,3H),3.76(s,3H),4.64(d,J=7.2Hz,2H),5.51(m,1H),6.95(s, 1H),7.05-7.11(m,3H),7.31-7.35(m,2H),7.57(dd,J=8.7,2.4Hz,1H),7.64(d,J=2.4Hz,1H) !R(CHCl <sub>3</sub> )2938,1731,1602,1619,1472,1445,1370,1345,1290,1186,1116,1080,1064,1003,973,904,840cm <sup>-1</sup>

Table 118

	m.p.181-182°C
	$^{\prime} \text{HINMR(CD_3OD)} \ \delta \ 1.77 (s, 3H), 1.80 (d, J=0.9Hz, 3H), 3.42 (s, 3H), 3.74 (s, 3H), 4.65 (d, J=6.9Hz, 2H), 5.55 (m, 1H), 6.99-7.11 (m, 5H), 7.00 (m, D), 7.00 (m, D$
1.591	.15(d,J=2.1Hz,1H),7.32-7.36(m,2H)
	IR(KBr)3529,3424,2937,1714,1598,1519,1473,1417,1372,1336,1321,1258,1235,1157,1129,1080,1062,1004,989,917,854,83
	9,807,791,752,703cm '
	m.p.109.110°C
-	$\Psi \text{IINMR} (\text{CDCB}) \delta = 1.78 (\text{s}, 3H), 1.83 (\text{s}, 3H), 3.44 (\text{s}, 3H), 3.61 (\text{s}, 3H), 4.63 (\text{d}, J=6.6\text{Hz}, 2H), 5.63 (\text{m}, 1\text{H}), 5.72 (\text{s}, 1H), 6.94 (\text{d}, 11\text{H}), 1.83 (\text{m}, 12\text{H}), 1.83 (\text{m}, 12$
269-1	J=8.1Hz,111),6.96(s,111),7.04-7.10(m,211),7.16(dd,J=8.4,2.1Hz,1H),7.23(d,J=2.1Hz,1H),7.31-7.36(m,2H)
	IR(CHCl <sub>3</sub> )3538,2938,1731,1598,1519,1473,1391,1345,1290,1264,1159,1129,1080,1063,1004,900,862,839cm <sup>-1</sup>
	m.p.185-187°C
-	$^{1}\text{HNMR}(\text{CDCI}_3) \ \delta \ 3.78(s, 3\text{H}), 3.80(s, 3\text{H}), 4.82(s, 1\text{H}), 6.61(m, 1\text{H}), 6.88\cdot6.93(m, 2\text{H}), 6.96(s, 1\text{H}), 7.04(s, 1\text{H}), 7.23\cdot7.25(m, 1\text{H}), 7.45(s, 1\text{H}), 7.23\cdot7.25(m, 1\text{H}), 7.45(s, 1\text{H}), 7.23\cdot7.25(m, 1\text{H}), 7.45(s, 1\text{H}), 7.23\cdot7.25(m, 1\text{H}), 7.23(s, 1\text{H}), 7.23(s$
1-093	(d,J=0.9Hz,1H),7.48-7.53(m,2H),7.83(d,J=0.9Hz,1H),8.18(brs,1H)
	IR(KBr)3600-3200(br),1611,1523,1496,1464,1447,1388,1268,1239,1202,1046,1025cm <sup>-1</sup>
	m.p.188-189°C
-	'HNMR(CDC13) δ 3.19(8,3H),3.79(8,3H),3.81(8,3H),6.61-6.62(m,1H),6.96(8,1H),7.06(8,1H),7.24-7.26(m,1H),7.33-7.37(m,2H
1-594	),7.45(brs,211),7.64-7.68(m,2H),7.84(d,J=0.9Hz,1H),8.21(brs,1H)
	IR(KBr)3600-3200(br),1518,1494,1465,1419,1389,1351,1331,1314,1213,1177,1145,1051,1027cm <sup>-1</sup>
	m.p.98·101°C
	111NMIR(CDCh3) & 1.77(8,311), 1.78(8,311), 1.82(8,311), 1.86(8,311), 3.78(8,311), 3.79(8,311), 4.56(d, J=6.9Hz, 2H), 4.72(d, J=6.9Hz
1.595	H),5.39-5.44(m,1H),5.52-5.57(m,1H),6.53(d,J=3.0Hz,1H),6.97-7.03(m,4H),7.12(d,J=3.3Hz,1H),7.38(d,J=8.4Hz,1H),7.45(dd,J=0.00000000000000000000000000000000000
	J=1.8,8.7Hz,1H),7.52.7.57(m,2H),7.81(d,J=1.5Hz,1H)
	1R(KBr)3600-2800(br),1606,1498,1476,1463,1382,1262,1241,1206,1177,1052,1030cm <sup>-1</sup>

Table 119

1-596	m.p.207-210°C 111NMR(CDCL) & 3.19(s,3H),3.80(s,3H),3.81(s,3H),5.50(s,2H),6.65(d,J=3.0Hz,1H),6.81(d,J=7.8Hz,1H),6.96(s,1H),7.05(s,1 11),7.19-7.22(m,1H),7.25-7.45(m,6H),7.54-7.60(m,1H),7.64-7.69(m,2H),7.86(brs,1H),8.61-8.64(m,1H) 118(KBr)3600-3200(br),1496,1478,1364,1347,1210,1176,1155,1052,1028cm <sup>-1</sup>	
1-597	m.p.222-224°C 111NMR(CDCh) 6 2.36(s,3H),2.53(s,3H),3.77(s,3H),3.78(s,3H),6.69(dd,J=0.9,4.2Hz,1H),6.95(s,1H),6.96(s,1H),7.23-7.28(m,2 11),7.31-7.35(m,2H),7.51-7.54(m,3H),7.59(d,J=3.3Hz,1H),7.73(d,J=1.2Hz,1H),7.80-7.84(m,2H),8.03(d,J=1.2Hz,1H) 11R(KBr)3600-3200(br),1509,1487,1464,1444,1366,1208,1172,1129,1092,1049,1028cm-1	
1-598	m.p.126·127°C  HNMR(CDCl <sub>3</sub> ) \$ 1.69(s,3H),1.71(d,J=0.9Hz,3H),2.56(dt,J=6.6,6.9Hz,2H),3.20(s,3H),3.22(s,3H),4.08(t,J=6.9Hz,2H),5.21(m  ,1H),7.08(d,J=8.4Hz,1H),7.18·7.27(m,2H),7.36·7.43(m,2H),7.50(dd,J=1.8,8.4Hz,1H),7.56(d,J=1.8Hz,1H),7.59·7.66(m,2H)  IR(KBr)1528,1488,1469,1395,1362,1342,1297,1265,1201,1176,1162,1116,968,890,872,818cm <sup>-1</sup>	
1-599	m.p.169-170°C IHNMR(DMSO-d <sub>6</sub> ) δ 2.32(9,3H),3.37(9,3H),3.45(9,3H),5.23(9,2H),7.23(d,J=7.8Hz,2H),7.37-7.44(m,3H),7.47-7.53(m,2H),7.5 6-7.66(m,4H),7.75(d,J=7.5Hz,2H) IR(KBr)1525,1485,1366,1355,1291,1262,1181,1150,1116,969,869,811cm <sup>-1</sup>	
I-600	m.p.123·124°C  HNMR(CDCl <sub>3</sub> ) Ø 1.68(9,3H),1.75(d,J=0.9Hz,3H),2.53(dt,J=7.2,6.9Hz,2H),4.07(t,J=6.9Hz,2H),4.91(9,1H),5.22(m,1H),5.72(9,1H),6.89-6.95(m,2H),7.07(m,1H),7.14·7.22(m,4H),7.44·7.51(m,2H)  IR(KBr)3448,1612,1593,1530,1489,1475,1401,1262,1212,1181,1169,1132,839,779cm <sup>-1</sup>	

Table 120

	m.p.184-185°C HINMR(DMSO-dc) & 2.31(8,3H),5.13(8,2H),6.85-6.91(m,2H),6.97(m,1H),7.07(d,J=8.4Hz,1H),7.07(d,J=1.8Hz,1H),7.20(d,J=
109-1	8.1Hz,2H),7.32-7.48(m,6H) IR(KBr)3290,1614,1629,1491,1459,1449,1405,1380,1267,1254,1167,1132,783cm <sup>1</sup>
	m.p.141-142°C HINMR(CDCl3) & 1.77(9,3H), 1.82(9,3H), 3.46(8,3H), 3.78(8,3H), 4.56(d, J=6.8Hz, 2H), 5.54(t, J=6.6Hz, 1H), 6.96-7.26(m, 7H), 7.6
709-1	1(dd,J=5.2,8.GHz,2H),9.88(e,JH) IR(KBr)3433,2955,2922,2865,2833,1687,1604,1515,1462,1288,1258,1232,1180,1160,1070,998,845cm <sup>-1</sup>
1-603	m.p.169-170°C 1HNMR(CDCl <sub>3</sub> ) & 2.38(s,3H),3.46(s,3H),3.77(s,3H),5.07(s,2H),7.02-7.38(m,7H),7.61(dd,J=5.4,8.8Hz,2H),9.89(brs,1H)
	IR(KBr)3433,2936,2840,1698,1517,1462,1251,1233,1067,999,837cm
	m.p.120-121°C HNMR(CDCl <sub>3</sub> ) δ 1.68(9,3H),1.74(8,3H),2.50-2.57(m,2H),3.46(8,3H),3.77(8,3H),3.98(t,J=7.0Hz,2H),5.24(t,J=7.0Hz,1H),6.9
1.604	4-7.26(m,711),7.61(dd,J=5.4,8.8Hz,2H),9.88(brs,1H)  R(KBr)3435,2960,2937,2876,1698,1605,1516,1464,1441,1379,1296,1272,1233,1221,1161,1073,1024,845,807cm <sup>-1</sup>
	m.p.151-152°С нНNMR(DMSO-de) δ 1.34(e,6H),3.07-3.15(m,1H),3.32(e,3H),3.67(e,3H),3.97-4.08(m,1H),4.28-4.34(m,1H),6.48(e,1H),7.00(d,
1.605	J=7.8Hz,2H),7.22-7.35(m,4H),7.66(dd,J=3.2,6.0Hz,2H),8.72(brs,1H) IR(KBr)3460,2960,2935,1607,1521,1488,1456,1392,1244,1226,1160,1122,1073,818cm <sup>-1</sup>
	m.p.164·165°C 'HNMR(DMSO-d <sub>6</sub> ) δ 2.32(s,3H),3.31(s,3H),3.66(s,3H),5.08(s,2H),6.46(s,1H),6.99(d,J=5.8Hz,2H),7.20-7.38(m,4H),7.65(dd,J
1.606	=3.6,6.2Hz,2H),8.69(brs,1H) IR(KBr)3367,2940,1605,1519,1484,1466,1449,1390,1229,1181,1168,1059,1006,987,831,817cm <sup>-1</sup>

Table 121

	m.p.103-104°C
603	111NMR(DMSO-da) & 1.37(s,611),2.47-2.59(m,211),3.31(s,311),3.66(s,311),3.94-4.06(m,111),4.26-4.34(m,111),6.44(s,111),7.02(d,
100-1	J=7.6Hz,2H),7.18-7.35(m,4H),7.64(dd,J=3.4,6.6Hz,2H),8.77(brs,1H)
	IR(KBr)3400,2993,2961,2930,1607,1522,1486,1471,1454,1393,1226,1123,1072,835,819cm - 1
	m.p.157-158°C
90.7	111NMR(DMSO-ds) & 1.73(s,311),1.77(s,311),3.31(s,311),3.72(s,311),4.54(d,J=6.9Hz,2H),5.47(t,J=7.2Hz,1H),6.93(d,J=8.7Hz,2
200 <u>-1</u>	11),7.05(8,111),7.19(d,J=9.0Hz,2H),7.30-7.36(m,2H),7.70(dd,J=5.4,8.7Hz,2H)
	IR(KBr)3406,2936,1712,1608,1519,1472,1444,1375,1235,839cm <sup>-1</sup>
	m.p.215-216°C
000	1HNMR(DMSO-d6) & 2.34(s,3H),3.33(s,3H),3.74(s,3H),5.09(s,2H),7.00-7.07(m,3H),7.22-7.39(m,8H),7.73(dd,J=5.6,8.0Hz,2H
600-1	
	IR(KBr)3494,3289,2938,1745,1698,1520,1471,1461,1378,1296,1239,1183,1159,829cm <sup>-1</sup>
	m.p.169.170°C
91.7	IHNMR(DMSO.da) 5 1.64(e, 3H), 1.71(e, 3H), 2.41-2.46(m, 2H), 3.32(e, 3H), 3.73(e, 3H), 3.97(t, J=6.6Hz, 2H), 5.23(t, J=7.2Hz, 1H),
210-1	6.93(d,J=8.1Hz,2H),7.05(s,1H),7.20(d,J=7.2Hz,2H),7.30-7.36(m,2H),7.70(dd,J=4.5,7.5Hz,2H)
	IR(KBr)3424,2933,1701,1609,1519,1471,1379,1294,1248,1061,839cm-1
	m.p.167-168°C
	"HNMR(CDCl <sub>3</sub> ) & 1.75(s,3H),1.82(s,3H),2.35(s,6H),2.45(s,3H),3.21(s,3H),3.56(s,3H),3.70(s,3H),4.35(d,J=6.9Hz,2H),5.60(t,J
 	=7.211z,111),6.84(a,111),7.08(a,211),7.38(d,J=8.711z,211),7.70(d,J=9.011z,211)
	IR(KBr)3433,2932,1509,1475,1376,1359,1232,,1177,1152,1085,966,874,797cm <sup>-1</sup>

Table 122

1-612	m.p.175-176°C HINMR(CDCL <sub>3</sub> ) & 2.35(a,6H),2.39(a,3H),2.49(a,3H),3.21(a,3H),3.56(a,3h),3.79(a,3H),4.83(a,2H),6.84(a,1H),7.10(a,2H),7.22(d ,J=7.5Hz,2H),7.38(d,J=8.4Hz,4H),7.70(d,J=9.0Hz,2H) HR(KBr)3434,2936,1510,1475,1363,1229,1176,1152,1083,964,871,803cm <sup>1</sup>
1.613	m.p.138-139°C HINMR(CDCh.) & 1.69(s,311), 1.75(s,311), 2.33(s,611), 2.52-2.55(m,211), 3.21(s,311), 3.56(s,311), 3.78(s,311), 3.79(t,J=6.911z,211), 5. 27(t,J=6.611z,111), 6.83(s,311), 7.08(s,611), 7.38(d,J=8.711z,211), 7.70(d,J=9.011z,211) IR(KBr)3432,2939,1509,1476,1448,1362,1237,1172,1155,1103,1081,963,873,800cm <sup>-1</sup>
1-614	m.p.89-90°C HINMR(DMSO-d <sub>6</sub> ) δ 1.74(9,3H),1.77(8,3h),3.36(8,3H),3.67(9,3H),4.22(d,J=3.0Hz,2H),4.56(d,J=6.3Hz,2H),5.48(t,J=5.7Hz,1 H),6.93-6.96(m,3H),7.11(d,J=8.7Hz,2H),7.28-7.34(m,2H),7.68(dd,J=6.0,8.7Hz,2H) IR(KBr)3528,3418,2935,1608,1518,1472,1233,1004,836cm <sup>-1</sup>
1-615	m.p.89-90°C 'HINMR(I)MSO-d <sub>6</sub> ) δ 2.33(8,311),3.36(8,311),3.67(8,311),4.22(d,J=3.9Hz,211),4.59(t,J=4.2Hz,1H),5.09(8,2H),6.94(8,1H),7.02(d 'J=8.4Hz,2H),7.22(d,J=8.4Hz,4H),7.28·7.39(m,4H),7.68(dd,J=5.7,8.4Hz,2H) IR(KBr)3485,2931,1517,1473,1460,1383,1243,1225,1079,1014,1001,834,798cm <sup>-1</sup>
1.616	oil

Table 123

1.617	m.p. 138-1397; HINMR(DMSO-da) & 1.70(s,3H), 1.77(s,3H),2.24(s,6H),3.30(s,3H),3.64(s,3H),4.31(d,J=6.9Hz,2H),5.56(t,J=6.6Hz,1H),6.39(s, HI),6.84(d,J=8.4Hz,2H),6.91(s,2H),7.44(d,J=8.4Hz,2H),8.50(s,1H),9.50(s,1H) HR(KBr)3400,2966,2934,1609,1519,1465,1444,1389,1362,1269,1228,12H,1194,1171,1118,1089,1027,953cm <sup>-1</sup>
1.618	m.p.122-123°C <sup>1</sup> HINMR(DMSO-da) δ 2.29(s,6H),2.37(s,3H),3.30(s,3H),3.67(s,3H),4.81(s,2H),6.43(s,1H),6.86(d,J=7.5Hz,2H),6.97(s,2H),7.27 (d,J=6.9Hz,2H),7.42-7.48(m,2H),8.54(s,1H),9.52(s,1H) <sup>1</sup> HR(KBr)3483,3423,2931,1735,1709,1612,1520,1477,1454,1411,1395,1362,1224,1176,1117,1089,1028cm <sup>-1</sup>
1-619	m.p.81-82°C <sup>1</sup> HNMR(DMSO-da) δ 1.70(9,3H),1.76(9,3H),2.18-2.30(m,2H),2.27(9,6H),3.34(9,3H),3.68(9,3H),3.80(t,J=4.5Hz,2H),5.34(t,J= <sup>5</sup> .1Hz,1H),6.43(9,1H),6.88(d,J=7.5Hz,2H),6.94(9,6H),7.46-7.50(m,2H),8.53(9,1H),9.54(9,1H) <sup>1</sup> R(KBr)3410,2930,1612,1521,1479,1454,1395,1361,1265,1227,1174,1117,1090,1028,825cm <sup>-1</sup>
1-620	m.p.161-162°C !HNMR(CDCh;)
1.621	m.p.139-141°C <sup>1</sup> HNMR(CDCl <sub>3</sub> ) ô 1.33(e,9H),1.68(e,3H),1.74(e,3H),2.54(q,J=6.9Hz,2H),3.19(e,3H),3.20(e,3H),3.39(e,3H),3.73(e,3H),4.05(t,J=6.9Hz,2H),5.21(t,J=6.9Hz,1H),5.95(e,1H),6.79(e,1H),7.02(d,J=8.4Hz,1H),7.29(dd,J=8.4,1.9Hz,1H),7.33(d,J=1.9Hz,1H),7.3 <sup>6</sup> 6(d,J=8.7Hz,2H),7.66(d,J=8.7Hz,2H) <sup>1</sup> 1R(KBr)3416,1720,1519,1469,1365,1237,1152,1117,975,815cm <sup>-1</sup>

Table 124

	m.p.197-199°C
	-НИМВ(DMSO-da) δ 2.33(s,3H),3.31(s,6H),3.43(s,3H),3.64(s,3H),3.74(s,3H),4.47(s,2H),5.19(s,2H),6.28(s,1H),7.21-7.25(m,4
779-1	H),7.35(d,J=8.7Hz,1H),7.40-7.44(m,4H),7.70(d,J=9.0Hz,2H)
	IR(KBr)3482,3386,1697,1519,1484,1368,1353,1150,872,813cm <sup>1</sup>
	m.p.99-101°C
	111111111111111111111111111111111111
1-623	.811z,111),6.82(d,J=8.711z,211),7.01(d,J=8.011z,111),7.21(d,J=7.811z,211),7.39(d,J=7.8Hz,2H),7.41(d,J=8.7Hz,2H),9.02(brs,1H
	),9.45(brs, 1H)
	IR(KBr)3390, 1609, 1592, 1521, 1484, 1246, 1227, 1117, 1011, 810cm-1
	m.p.215-217°C
	111 NM IR (CDCl <sub>3</sub> +CD <sub>3</sub> OD) d3.78(s,3H),3.79(s,3H),5.49(s,2H),6.64(dd,J=0.6,2.7Hz,1H),6.79(d,J=8.1Hz,1H),6.90(d,J=8.7Hz,2
1.624	H), $6.96(8,1H)$ , $7.02(8,1H)$ , $7.19$ - $7.32(m,3H)$ , $7.40$ - $7.50(m,3H)$ , $7.56$ - $7.60(m,1H)$ , $7.85(d,J=0.9Hz,1H)$ , $8.58$ - $8.60(m,1H)$
	1R(KBr)3600-2600(br), 1611, 1599, 1500, 1477, 1445, 1395, 1264, 1238, 1210, 1052, 1029, 1008cm <sup>-1</sup>
	m.p.213-214T
	1HNMR(CDCl <sub>3</sub> ) & 2.36(9,3H),3.77(9,6H),6.70(dd,J=0.6,3.6Hz,1H),6.93(9,1H),6.96(9,1H),7.08-7.16(m,2H),7.24-7.28(m,2H),7.
czo-1	51.7.60(m,4H),7.73(d,J=1.5Hz,1H),7.80.7.84(m,2H),8.03(d,J=9.0Hz,1H)
	IR(KBr)3600-2800(br), 1597, 1517, 1496, 1464, 1444, 1372, 1209, 1189, 1172, 1157, 1121, 1092, 1050, 1028cm <sup>1</sup>
	111111111111111111111111111111111111
1.626	1.626   m,6H),7.61(d,J=2.1Hz,1H),7.73(d,J=8.4Hz,2H),8.12(d,J=8.4Hz,2H)
	IR(KBr)3432, 1616, 1520, 1494, 1452, 1388, 1352, 1282, 1261, 1211, 1186, 1175, 1113, 1058, 1033cm - 1
	${\rm 1HNMR(CDCl_3)} \ \delta \ 3.81(s,6H), \ 5.17(s,2H), \ 6.99(s,1H), \ 7.00(d,J=8.4Hz,1H), \ 7.09(dd,J=8.4\&1.8Hz,1H), \ 7.23(d,J=1.8Hz,1H), \ 7.09(dd,J=8.4\&1.8Hz,1H), \ 7.23(d,J=1.8Hz,1H), \ 7.23(d,J=1$
1.627	7.33.7.50 (m, 5H), 7.76(.d,J=8.4Hz,2H), 8.10(d,J=8.4Hz,2H)
	IR(KBr)3551,3520,3399,1615,1587,1576,1521,1488,1455,1383,1268,1245,1208,1126,1055,1034,1003cm <sup>-1</sup>

Table 125

1-628	HNMR(CDCl <sub>3</sub> ) & 3.05(s, 3H), 3.47(s, 3H), 3.75(s, 3H), 5.15(s, 2H), 6.45(s, 1H), 6.94(dd, J=8.4&1.8Hz, 1H), 7.03(d, J=8.4Hz, 1H), 7.0   G(d, J=1.8Hz, 1H), 7.30(d, J=8.1Hz, 2H), 7.36-7.51(m, 5H), 7.63(d, J=8.1Hz, 2H)   IR(KBr)3525, 3472, 1609, 1588, 1522, 1487, 1455, 1407, 1321, 1286, 1242, 1148, 1115, 1071, 1013cm <sup>-1</sup>
1-629	HINMR(CDC)a) \(\delta\) 2.68(s, 311), 3.07(s, 311), 3.14(s, 311), 3.55(s, 311), 3.78(s, 311), 5.19(s, 211), 6.85(s, 111), 7.16(d, J=8.7112, 111), 7.27-7. 50(m, 911), 7.62(d, J=9.011z, 211) 1R(KBr)3432, 1611, 1522, 1482, 1462, 1392, 1358, 1295, 1233, 1178, 1154, 1119, 1082, 1012cm^-1
1-630	111NMR(CDC3.) δ 2.88(s.311), 3.08(s.311), 3.28(s.311), 3.30(s.311), 3.54(s.311), 3.79(s.311), 6.87(s.111), 7.32(d,J=8.4Hz,2H), 7.43 (d.d, J=8.4&2.1Hz, 111), 7.54-7.65(m,411)  IR(KBr)3432, 1612, 1519, 1481, 1367, 1332, 1232, 1177, 1154, 1077, 1011 cm <sup>-1</sup>
1.631	<sup>1</sup> HNMR(CDCl <sub>3</sub> ) & 1.57(s,3H), 169(s,3H), 2.66(s,3H), 2.97(s,3H), 3.13(s,3H), 3.54(s,3H), 3.77(s,3H), 4.31(d,J=7.2Hz,2H), 5.19(s,2H), 5.21-5.32 (m,1H), 6.86(s,1H),7.15(d,J=8.7Hz,1H),7.30-7.52(m,9H),7.63(d,J=8.4Hz,2H) <sup>1</sup> IR(KBr)1699,1520,1481,1365,1338,1294,1270,1233,1178,1163,1118,1078,1015,947cm <sup>-1</sup>
1-632	<sup>1</sup> HNMR(CDCl <sub>3</sub> ) & 1.45(s,3H),1.59(s,3H),1.66(s,3H),1.70(s,3H),2.97(s,3H),3.11(s,3H),3.64(s,3H),3.75(s,3H),4.28(d,J=8.4Hz,2H),4.32(d,J=8.4Hz,2H),5.18(s,2H),5.23(t,J=8.4Hz,1H)),5.29(t,J=8.4Hz,1H),6.70(s,1H),7.10(d,J=8.4Hz,1H),7.30-7.51(m,9H),7.58(d,J=8.4Hz,2H)
1-633	<sup>1</sup> HNMR(CDCL <sub>3</sub> ) δ 1.58(8,3H), 1.69(8,3H), 2.97(8,3H), 3.45(8,3H), 3.75(8,3H), 4.33(d, J=7.5Hz,2H), 5.16(8,2H), 5.24-5.33(m,1H), 5.69 (8, 1H), 5.87(8,1H), 6.47(8,1H), 6.95(d,d,J=8.4&2.1Hz,1H), 7.03(d,J=8.4Hz,1H), 7.09(d,J=2.1Hz,1H), 7.31.7.50(m,7H), 7.65 (d,J=8.4Hz,2H) (1.24), 2.14 (1.24), 1.448, 1.421, 1.320, 1.233, 1.143, 1.117, 1.073, 1.019cm.
I-634	<sup>1</sup> HNMR(CDCl <sub>3</sub> ) & 1.57(s,3H),1.68(s,3H),2.66(s,3H),2.70(s,3H),3.13(s,3H),3.54(s,3H),3.78(s,3H),4.33(d,J=8.4Hz,2H),5.19(s,2H),5.26(t,J=8.4Hz),6.86(s,1H),7.15(d,J=8.7Hz,1H),7.30-7.49(m,9H),7.63(d,J=8.4Hz,2H) IR(KBr)1615,1517,1480,1372,1337,1233,1213,1178,1154,1076,1014cm <sup>-1</sup>

Table 126

. 

	$HINMR(CDCl_3) \ \delta \ 1.58(s, 3H), 1.69(s, 3H), 2.82(s, 3H), 2.97(s, 3H), 3.29(s, 3H), 3.53(s, 3H), 3.77(s, 3H), 4.33(d, J=7.2Hz, 2H), 5.27(t, J=1.2Hz, 2Hz, 2Hz, 2Hz, 2Hz, 2Hz, 2Hz, 2Hz, $
1-635	=7.211z,111),6.25(s,1H),6.86(s,111),7.17(d,J=9.0Hz,1H)),7.23·7.32(m,2H),7.41(d,J=8.7Hz,2H),7.63(d,J=8.7Hz,2H)
	IR(KBr)3431,1611,1522,1482,1364,1337,1294,1231,1178,1153,1077,1014cm <sup>-1</sup>
	111111111111111111111111111111111111
1-636	5.87 (s, 111), 6.45(s, 111), 6.60(s, 111), 6.89-7.01(m, 211), 7.05(d, J=0.611z, 111), 7.30(.d, J=8.711z, 211), 7.65(d, J=8.711z, 211)
	1R(KBr)3448,3265,1612,1585,1521,1487,1330,1287,1243,1225,1152,1112,1069,971cm <sup>-1</sup>
	111111111111111111111111111111111111
	$(4.1 - 6.9 + 12.2 + 1), 4.64 \\ (4.1 - 6.6 + 12.2 + 1), 5.27 \\ (4.1 - 6.9 + 12.1 + 1), 5.49 \\ (4.1 - 6.6 + 11), 6.86 \\ (6.1 + 11), 6.86 \\ (6.1 + 1), 7.09 \\ (4.1 - 8.4 + 11), 7.32 \\ (7.44 \\ (m.4 + 11), 1.10 \\ (1.1 + 1.10), 1.10 \\ (1.1 + 1.1$
1-637	,7.63(d,J=8.411z,2H)
	IR(KBr)1609,1520,1481,1365,1339,1292,1270,1236,1178,1153,1118,1078,1015cm <sup>-1</sup>
	1HNMR(CDCI3) & 1.58(9,3H), 1.69(8,3H), 1.76(8,3H), 1.82(8,3H), 2.97(8,3H), 3.45(8,3H), 3.75(8,3H), 4.32(d,J=7.8Hz,2H),
-	4.63(.d.J=7.811z,2H),5.23-5.33(m,1H),5.48-5.57(m,1H),5.69(s,1H),5.85(s,1H),6.46(s,1H),6.89-7.02(m,2H),7.05 (d. $J=1.8Hz$ ,
1-638	1H), 7.40 (d, J= 8.7Hz, 2H), 7.65(d,J=8.7Hz,2H)
	IR(KBr)3450,1609,1588,1557,1525,1487,1445,1327,1248,1114,1114,1072,1015cm <sup>-1</sup>
	'HNMR(CDCl <sub>3</sub> ) δ 2.55(8,3H), 2.67(8,3H), 3.58(8,3H), 3.79(8,3H), 5.18(8,2H), 5.71(8,1H), 6.85(8,1H), 6.91 (d.d. J=8.4&
1-639	2.1Hz, 1H), 7.03(d,J=8.4Hz,1H), 7.04(d,J=2.1Hz,1H), 7.32-7.48 (m, 6H), .7.85(.d.d,J=7.8&1.5Hz,1H),8.22(d,J=1.5Hz,1H)
	IR(KBr)3457,1739,1529,1481,1407,1376,1346,1279,1243,1177,1128,1071,1012cm <sup>-1</sup>
	1HNMR(CDCl3) & 2.67(8,3H),2.68(6,3H),3.13(8,3H),3.58(8,3H),3.80(8,3H),5.19(8,2H),6.86(8,1H),7.15(d,J=8.7Hz,1H),7.31-
1.640	I.640 7.49 (m, 8H), 7.83 (d.d,J=8.1&1.8Hz,1H),8.21(d,J=1.8Hz,1H)
	IR(KBr)3433,1609,1530,1481,1372,1290,1268,1238,1177,1118,1075,1012cm <sup>-1</sup>

Table 127

1.641	HINMR(CDCB) & 2.67(s,3H), 3.50(s,3H), 3.77(s,3H), 5.16(s,2H), 5.70(s,1H), 5.83(s,1H), 6.47(s,1H), 6.94 (d.d, J=8.7 (s,1H), 7.04 (d, J=8.7Hz,1H), 7.07(d,J=1.8Hz,1H),7.34-7.48(m,5H),7.82(d.d,J=8.1&1.8Hz,1H),8.26(.d,J=1.8Hz,1H) (HKBr)3555,3377,1590,1529,1503,1451,1414,1344,1242,1225,1121cm <sup>-1</sup>
1-642	·HINMR(СЭСЭ) δ 2.29(8,3H),2.68(8,3H),3.12(8,3H),3.56(8,3H),3.76(8,3H),5.18(8,2H),6.85(8,1H),7.00-7.20(m,4H),7.31-7.49( m,7H) IR(КВг)3407,1624,1518,1480,1361,1287,1270,1234,1175,1117,1084,1009cm
1-643	111NMR(CDCR <sub>3</sub> ) & 2.40(s,3H),2.67(s,3H),3.09(s,3H),3.13(s,3H),3.59(s,3H),3.78(s,3H),5.19(s,1H),6.17(s,1H),6.85(s,1H),7.15(d,J=8.4Hz,1H),7.30-7.49(m,9H),7.69(d,J=1.8Hz,1H)  IR(KBr)3433,3304,1608,1519,1481,1365,1326,1294,1269,1237,1177,1156,1114,1079,1015cm <sup>-1</sup>
1-644	<sup>1</sup> HNMR(CDCl <sub>3</sub> ) δ 2.09(8,3H),2.39(8,3H),2.68(8,3H),3.13(8,3H),3.49(8,3H),3.76(8,2H),5.19(8,2H),6.30(8,1H),6.77(8,1H),7.12-7.24(m,3H),7.31-7.49(m,9H),7.54(d,J=1.8Hz,1H),7.67(d,J=8.4Hz,2H) <sup>1</sup> R(KBr)3434,1608,1519,1481,1366,1293,1269,1237,1164,1114,1081,1016cm <sup>-1</sup>
1-645	<sup>1</sup> HNMR(CDCl <sub>3</sub> ) δ 2.09(s,3H), 2.39(s,3H), 3.43(s,3H), 3.73(s,3H), 5.16(s,2H), 5.30(s,1H), 5.68(s,1H), 5.89(s,1H), 6.32(s,1H), 6.32(s,1H), 6.36(s,1H), 6.36(s,1H), 7.03(s,1H), 7.03(s,1H), 7.08(s,1H), 7.08(s,1H), 7.14-7.28(s,3H), 7.34-7.50(s,5H), 7.61 (s,1H), 7.68 (s,1=8.4Hz,2H)  IR(KBr)3465,3270,1612,1587,1558,1519,1487,1454,1384,1244,1160,1123,1105,1091,1070,1009cm <sup>-1</sup>
1-646	<sup>1</sup> HNMR(CDCl <sub>3</sub> ) & 2.48(e,3H),2.63(e,3H),3.02(e,3H),3.13(e,3H),3.28(e,2H),3.54(e,3H),3.78(e,3H),5.19(e,2H),6.85(e,1H),7.15(d,J=8.4Hz,1H),7.30-7.49(m,9H),7.59(e,1H)  d,J=8.4Hz,1H),7.30-7.49(m,9H),7.59(e,1H)  1R(Kls <sub>1</sub> )3433,1606,1519,1481,1364,1341,1292,1272,1233,1178,1148,1118,1082cm <sup>-1</sup>
1-647	<sup>1</sup> HNMR(CDCl <sub>3</sub> ) δ 2.48(8,3H), 3.02(8,3H), 3.28(8,3H), 3.46(8,3H), 3.75(8,3H), 5.16(8,2H), 5.70(8,1H), 5.84(8,1H), 6.47(8,1H), 6.94 (d.d, J=8.4&2.1Hz,1H), 7.03(d,J=8.4Hz,1H), 7.07(d,J=2.1Hz,1H), 7.33-7.53(m,7H), 7.62(d,J=1.8Hz,1H) IR(KB <sub>7</sub> )3528,3429,1609,1584,1558,1517,1487,1454,1331,1317,1115,1068,1002cm <sup>-1</sup>

Table 128

.

HNMR(C   1.648   =1.8Hz,1H   IR(RBr)34   HNMR(C   1.649   1,7.53(d,J=   HNMR(C   4.62   (d,J=   1.650   &1.8Hz,1H   J=1.8Hz,1H   HNMR(C   1.651   =8.4Hz,1H	HINMR(CDCL <sub>3</sub> ) & 1.55(a,3H),2.45(a,3H),2.79(a,3H),3.02(a,3H),3.29(a,3H),3.52(a,3H),3.77(a,3H),4.12-4.31(m,2H),5.22-5.31(m,2H),5.22-5.31(m,2H),5.22-5.31(m,2H),7.53(d,3H),7.53(d,
	2 000 000 000 000 000 000 000 000 000 0
	(b.30(8,1111),0.04(8,111), (1.1 (u.g. = 0.1116,111), (1.2 (u.g. = 0.1116,111), (1.1 (u.g. = 0.116,111), (1.1
	(11)
	IR(KBr)3431,1609,1522,1481,1365,1334,1294,1235,1178,1150,1077,1013cm <sup>-1</sup>
	HINMIR(CDCI3) & 1.54(8,311), 1.68(8,311), 1.76(8,311), 1.81(8,311), 2.45(8,311), 2.68(8,311), 3.62(8,311), 3.24(8,311), 3.52(8,311), 3.78(8,311), 3.
	.3H, $.310.4.34$ (m, $2H$ ), $4.64$ (d, $J=7.2H$ z, $211$ ), $5.21.5.30$ (m, $1H$ ), $5.45.5.53$ (m, $1H$ ), $6.84$ (e, $1H$ ), $7.08$ (d, $J=8.4$ Hz, $1H$ ), $7.31.7.48$ (m, $4H$ c) $1.31.7.48$ (m, $4H$ c) $1.31.7.31$ c) $1.31.7.48$ (m, $4H$ c) $1.31.7.31$ c) $1.31.7.48$ (m, $4H$ c) $1.31.7.31$ c) $1.31.7.31$ c) $1.31.7.48$ (m, $4H$ c) $1.31.7.31$ c)
<del></del>	,7.53(d,J=1.5Hz,1H)
	IK(KBr)3432,1606,1518,1481,1362,1340,1292,1276,1236,1177,1153,1116,1076,1010cm <sup>-1</sup>
	$HNMR(CDCl_3) \ \delta \ 1.56(s,3H), 1.68(s,3H), 1.76(s,3H), 1.82(s,3H), 2.44(s,3H), 3.02(s,3H), 3.45(s,3H), 3.75(s,3H), 4.10-4.32(m,2H), 1.82(s,3H), 1.82$
	d,J=7.2Hz,2H),5.22-5.32(m,1H),5.48-5.57(m,1H),5.60-5.80(brroad,1H), 5.82(s,1H), 6.46(s,1H), 6.92 (d.d, J=8.1
	&1.8Hz,1H), 6.97(d, J=8.1Hz, 1H), 7.04(d,J=1.8Hz,1H), 7.38(d,J=8.1Hz,1H), 7.47(d,d,J=8.1&1.8Hz,1H), 7.57 (d,
	(z,1H)
	r)3433,1610,1586,1557,1518,1486,1336,1240,1149,1110,1069cm <sup>-1</sup>
	HNMR(CD3OD) & 3.33(s,3H),3.66(s,3H),5.18(s,2H),6.42(s,1H),1H),6.75(dd,J=8.4&2.1Hz,1H),6.87(d,J=2.1Hz,1H),6.95(d,J
	r,1H),7.26-7.58(m,8H),7.81(d.d,J=7.8&1.2Hz,1H)
IR(KBr	IR(KBr)3446,1698,1586,1517,1498,1481,1464,1408,1287,1247,1117,1069,1010cm <sup>-1</sup>
HNM	HNMR(CDCl <sub>3</sub> ) & 1.76(8,3H), 1.81(8,3H), 2.76(8,3H), 3.23(8,3H), 3.43(8,3H), 3.72(8,3H), 3.76(8,3H), 4.64(d,J=6.6Hz,2H), 5.50(t,J
I-652 =6.6Hz,1	z,1H),6.78(8,1H),7.08(d,J=8.7Hz,1H),7.33-7.51(m,4H),7.56-7.63(m,1H),7.96(d.d,J=7.5&1.2Hz,1H)
	r)1725,1609,1520,1480,1400,1366,1295,1260,1178,1119,1073,1010cm <sup>-1</sup>
INNII	111NMR(CDCl <sub>3</sub> ) & 2.38(6,3H), 2.72(6,3H), 3.12(6,3H), 3.43(6,3H), 3.73(6,3H), 3.76(6,3H), 5.14(6,2H), 6.79(6,1H), 7.13-7.24(m,3H),
1.653 7.30-7.38	38(m,3H),7.41-7.51(m,3H),7.56-7.63(m,1H),795(d.d,J=7.5&1.2Hz,1H)
IR(KBr)1	r)1725,1610,1520,1481,1401,1370,1293,1262,1179,1119,1076,1011cm <sup>-1</sup>

Table 129

1-654	<sup>1</sup> HNMR(CDCh) & 1.75(s, 3H), 1.81(s, 3H), 3.56(s, 3H), 3.72(s, 3H), 4.60(d, J=6.6Hz, 2H), 5.29(s, 1H), 5.46-5.56(m, 1H), 5.56-6.00(br ond, 1H), 6.42(s, 1H), 6.94(s, 2H), 7.05(s, 1H), 7.43-7.52(m, 2H), 7.56-7.65(m, 1H), 7.99(d, J=8.7Hz, 1H)  1R(RB)3433, 1697, 1585, 1517, 1481, 1454, 1410, 1287, 1244, 1117, 1068cm <sup>1</sup>
999-1	11INMR(CDCE) & 2.39(8,3H), 3.37(8,3H), 3.72(8,3H), 5.10(8,2H), 6.41(8,1H), 6.94(dd,J=8.1&2.1Hz,1H), 7.02(d,J=8.1Hz,1H), 7.0 (d,J=2.1Hz,1H), 7.23(d,J=7.8Hz,2H), 7.35(d,J=7.8Hz,2H), 7.35(d,J=7.8Hz,2H), 7.35(d,J=7.8Hz,1H) (d,J=7.8Hz,1H) (d,J=7.8Hz,1H) (d,J=7.8Hz,1H) (d,J=7.8Hz,1H)
999-1	m.p.110-112°U: HNMR(CDCl.) & 1.69(s,3H),1.74(s,3H),2.55(q,J=7.1Hz,2H),3.20(s,3H),3.21(s,3H),3.39(s,3H),3.70(s,3H),4.07(t,J=7.1Hz,2H ),5.22(t,J=7.1Hz,1H),6.28(s,1H),7.09(d,J=8.4Hz,1H),7.32(dd,J=8.4,2.0Hz,1H),7.36(d,J=8.9Hz,2H),7.37(d,J=2.0Hz,1H),7.69(d,J=8.9Hz,2H),1.37(d,J=2.0Hz,1H),7.69(d,J=8.9Hz,2H),1.37(d,J=8.9Hz,2Hz,2H),1.37(d,J=8.9Hz,2Hz,2H),1.37(d,J=8.9Hz,2Hz,2Hz,2Hz,2Hz,2Hz,2Hz,2Hz,2Hz,2Hz,2
1-657	m.p.159·162°C !HNMR(DMSO-d <sub>6</sub> ) & 1.64(8,3H),1.71(8,3H),2.45(q,J=6.7Hz,2H),3.27(8,3H),3.59(8,3H),3.96(t,J=6.7Hz,2H),4.22(8,2H),5.26(t,J=6.7Hz,1H),6.17(8,1H),6.60(dd,J=8.1,2.0Hz,1H),6.67(d,J=2.0Hz,1H),6.83(d,J=8.7Hz,2H),6.95(d,J=8.1Hz,1H),7.42(d,J=8.7 !!z,2!!),8.89(s,1H),9.46(s,1H) !R(KBr)3447,3401,3361,1611,1622,1486,1260,1228,1122,1001,814cm <sup>-1</sup>
1.658	m.p.146-147°C 1HNMR(CDCl <sub>3</sub> ) & 1.14(t,J=7.2Hz,3H),1.76(d,J=0.9Hz,3H),1.81(d,J=0.3Hz,3H),2.70(s,3H),3.20(s,3H),3.23(s,3H),3.72(q,J=7. 2Hz,2H),3.78(s,3H),4.64(d,J=6.6Hz,2H),5.49(m,1H),6.84(s,1H),7.09(d,J=8.4Hz,1H),7.31-7.41(m,4H),7.66-7.74(m,2H) 1R(CHCl <sub>3</sub> )2930,1608,1517,1479,1369,1148,1116,1082,969,872cm <sup>-1</sup>
699-1	m.p.174-175°C <sup>1</sup> HNMR(CDCl <sub>3</sub> )

Table 130

	m.p.147.5-148°C
	$411 \text{NMR}(C11) C13) \ \delta = 1.14 (1, J = 7.2 \text{Hz, 3H}), 1.68 (8, 3H), 1.74 (4, J = 0.9 \text{Hz, 3H}), 2.50 \cdot 2.59 (m, 2H), 2.72 (8, 3H), 3.20 (8, 3H), 3.22 (8, 3H), 3.74 (1, J = 0.9 \text{Hz, 3H}), 2.50 \cdot 2.59 (m, 2H), 2.72 (8, 3H), 3.20 (8, 3H), 3.24 (8, 3H), 3.25 (8, 3H)$
099-1	2(q, J=7.211z, 2H), 3.77(s, 3H), 4.07(d, J=6.911z, 2H), 5.21(m, 1H), 6.84(s, 1H), 7.07(d, J=8.7Hz, 1H), 7.31-7.42(m, 4H), 7.66-7.74(m, 2H), 7.06-7.74(m, 2H), 7.01-1.01(m, 2H), 7.01(m, 2H), 7.01(m, 2H), 7.01(m, 2H), 7.01(m, 2H)
	IR(CHCh, 2930, 1607, 1517, 1480, 1369, 1148, 1118, 1082, 1025, 969, 872cm
	m.p.164-157°C
	$111NM18(CIDCI_3) \delta - 1.15(t, J = 7.2 Hz, 3 H), 1.76(s, 3 H), 1.82(s, 3 H), 3.60(q, J = 7.2 Hz, 2 H), 3.76(s, 3 H), 4.61(d, J = 6.9 Hz, 2 H), 4.93(s, 1 H), 4.93(s, 2 H),$
199-1	5.53(m,1H),5.69(s,1H),5.96(s,1H),6.45(s,1H),6.80-6.98(m,4H),7.07(m,1H),7.51-7.58(m,2H)
	IR(CHCl <sub>1</sub> )3592,3528,2976,2934,1611,1521,1488,1460,1384,1286,1243,1169,1112,1068,994,885,824cm <sup>-1</sup>
	m.p.130.5-133℃
	$^{\rm HNMR(CDCU_3)}  \delta    1.15 (t, J = 7.2 Hz, 3H), 2.39 (s, 3H), 3.59 (q, J = 7.2 Hz, 2H), 3.74 (s, 3H), 4.83 (s, 1H), 5.10 (s, 2H), 5.66 (s, 1H), 5.97 (s, 1H), 2.97 (s, 2H), 2.39 (s, 2H), 3.59 (s, 2H), 3.59 (s, 2H), 3.74 (s, 3H), 3.74 (s, 3H), 4.83 (s, 2H), 4.83 (s, 2H), 5.10 (s, 2H), 5.10$
I-662	$), 6.44(8,111), 6.87\cdot6.94(m,211), 6.96(dd, J=1.8, 8.41z, 111), 7.02(d, J=8.41z, 111), 7.09(d, J=1.81z, 111), 7.19\cdot7.26(m, 211), 7.19\cdot7.26(m, 211$
	m,2H),7.51·7.58(m,2H)
	IR(CHCh)3524, 1612, 1521, 1488, 1460, 1383, 1286, 1246, 1113, 1069, 1027, 907, 873cm <sup>-1</sup>
	amorphous powder
	$^{\rm 1} {\rm HNMR}({\rm CDCl_3}) \ \delta \ \ 1.15 (t,J=7.2 {\rm Hz},3 {\rm H}), 1.68 (d,J=0.6 {\rm Hz},3 {\rm H}), 1.74 (d,J=0.9 {\rm Hz},3 {\rm H}), 2.48 \cdot 2.56 (m,2 {\rm H}), 3.60 (q,J=7.2 {\rm Hz},2 {\rm H}), 3.74 (s,2) (d,2) $
1-663	$3H), 4.06(d, J=6.9Hz, 2H), 4.95(s, 1H), 5.22(m, 1H), 5.68(s, 1H), 5.96(s, 1H), 6.44(s, 1H), 6.88\cdot6.99(m, 4H), 7.06(d, J=1.2Hz, 1H), 7.51-1.41(s, 1H), 7.51$
	7.58(m,2H)
	IR(CHCL;)3528,2972,1611,1521,1488,1384,1286,1246,1112,1068,1024,883,824cm <sup>-1</sup>
	m.p.113·116°C
	$^{1}\text{HNMR}(\text{CDC})_{3}) \ \delta \ \ 2.55(\text{s}, 6\text{H}), \\ 3.45(\text{s}, 3\text{H}), \\ 3.74(\text{s}, 3\text{H}), \\ 5.31(\text{s}, 2\text{H}), \\ 6.44(\text{s}, 1\text{H}), \\ 6.92(\text{d}, J = 8.7\text{Hz}, 2\text{H}), \\ 6.94(\text{dd}, J = 8.4, \\ 2.1\text{Hz}, 1\text{H}), \\ 7.10(\text{s}, 2\text{Hz}, 2\text{Hz}, 2\text{Hz}, 2\text{Hz}), \\ 6.94(\text{dd}, J = 8.4, \\ 2.1\text{Hz}, 1\text{H}), \\ 7.10(\text{s}, 2\text{Hz}, $
1-064	(s,1H),7.10(d,J=2.1Hz,1H),7.20(d,J=8:7Hz,1H),7.52(d,J=8.7Hz,2H)
	IR(Nujol)3491,3443,3304,3155,1662,1608,1523,1492,1464,1251,1215,1111,1067,811,782cm <sup>-1</sup>

Table 131

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50	45	40	35	30 .	25	20	15	10	5
1.665	m.p.>260°C !!!NM!R(C!) !!),7.11(d,J= !!R(Nujol)33	:0D)	1.68(s,311),5.40( =8.711z,211) 1530,1488,1458	(s,211),6.44(s,1	11),6.83(dd,J=	8.4,2.1Hz,1H)	6.85(d,J=8.7,	2H),6.90(d,J=	-2.1Hz,1
999-1		(Cl <sub>3</sub> ) δ 2.34(g,3H),2.44(g,3H),2.83(g,3H),3.12(g,3H),3.22(g,3H) H),7.37~7.42(m,2H),7.39(d,J=8.7Hz,2H),7.68(d,J=8.7Hz,2H) 38,1608,1519,1480,1459,1177,1151,1079,971,876,844,798cm	.44(s,3H),2.83( 1),7.39(d,J=8.7H	8,311),3.12(8,3 11z,211),7.68(d 1,1079,971,87	II),3.22(8,31I), ,J=8.7IIz,2II) 6,844,798cm	3.55(8,3H),3.7	8(8,311),4.92(8	,2H),6.85(s,1	H),7.17(
I-667	foam "HNMR(CDCl <sub>3</sub> ) \(\delta\) 2.07(e,3H),2.53(e,3H),2.96(e,3H),3.23(e,3H),3.27(e,3H),3.54(e,3H) d,J=9.0Hz,1H),7.33~7.41(m,2H),7.39(d,J=8.7Hz,2H),7.67(d,J=8.7Hz,2H) IR(Nujol)1724,1688,1610,1520,1481,1464,1234,1177,1151,1123,1081,876,798cm <sup>-1</sup>	Cl <sub>3</sub> ) δ 2.07(s,3H),2.53(s,3H),2.96(s,3H),3.23(s,3H),3.27(s,3H),3.54(s,3H),3.78(s,3H),4.86(s,2H),6.86(s,1H),7.11( H),7.33~7.41(m,2H),7.39(d,J=8.7Hz,2H),7.67(d,J=8.7Hz,2H) 24,1688,1610,1520,1481,1464,1234,1177,1151,1123,1081,876,798cm <sup>-1</sup>	53(s,3H),2.96(t),7.39(d,J=8.7F)	3,3H),3.23(8,3) 4z,2H),7.67(d,	H),3.27(8,3H), ,J=8.7Hz,2H) 123,1081,876,7	3.54(e,3H),3.7	8(s,3H),4.86(s	,2H),6.86(s,1]	Н),7.11(
1-668	m.p.221-223°C !HNMR(DMSO-da) δ 3.30(a,3H),3.64(a,3H),5.16(a,2H),6.39(a,1H),6.66(dd,J=8.4,2.1Hz,1H),6.77(d,7Hz,2H),7.00(d,J=8.4Hz,1H),7.34(a,1H),7.44(d,J=8.7Hz,2H),8.43(a,1H) !R(Nujol)3535,3411,1611,1582,1521,1488,1463,1244,1194,1135,1119,1074,1014,930,826,809cm-1	°C SO·dα) δ 3.30(8,3H),3.64(8,3H),5.16(8,2H),6.39(8,1H),6.66(dd,J=8.4,2.1Hz,1H),6.77(d,J=2.1Hz,1H),6.84(d,J=8. 0(d,J=8.4Hz,1H),7.34(8,1H),7.44(d,J=8.7Hz,2H),8.43(8,1H) 35,3411,1611,1582,1521,1488,1463,1244,1194,1135,1119,1074,1014,930,826,809cm <sup>-1</sup>	),3.64(s,3H),5.1 4(s,1H),7.44(d, 521,1488,1463	16(a,2H),6.39( J=8.7Hz,2H),	8,1H),6.66(dd, 8.43(s,1H) 135,1119,1074	J=8.4,2.1Hz,1	H),6.77(d,J=2,809cm <sup>-1</sup>	.1Hz,1H),6.84	1(d,J=8.
699-1	foam HINMR(CDCI <sub>3</sub> ) & 2.79(8,3H),3.17(9,3H),3.22(8,3H),3.55(8,3H),3.78(8,3H),5.21(6,2H),6.85(8,1H),7.19(d,J=8.4Hz,1H),7.23(6, HI),7.38(dd,J=8.7,2.1Hz,1H),7.39(d,J=8.7Hz,2H),7.42(d,J=2.1Hz,1H),7.68(d,J=8.7Hz,2H),7.94(e,1H) IR(Nujol)1608,1519,1480,1463,1177,1151,1119,1079,971,876,798cm <sup>-1</sup>	5 2.79(8,3H),3.1 7,2.1Hz,1H),7.3: 19,1480,1463,1	17(s,3H),3.22(s 9(d,J=8.7Hz,2l	,3H),3.55(8,3l H),7.42(d,J=2,	H),3.78(s,3H),! .1Hz,1H),7.68(	5.21(a,2H),6.8k	5(8,1H),7.19(d	,J=8.4Hz,111)	,7.23(8,

Table 132

1.670	m.p.198-201 °C HINMR(DMSO-da) & 2.88(8,3H),3.39(8,3H),3.45(8,3H),3.52(8,3H),3.78(8,3H),4.58(8,2H),5.60(8,1H),7.07(8,1H),7.29(dd,J=9.0 ,1.8Hz,1H),7.30(d,J=1.8,Hz,1H),7.37(d,J=9.0Hz,1H),7.48(d,J=8.7Hz,2H),7.74(d,J=8.7Hz,2H),9.39(8,1H) HR(Nujol)3576,3500,3405,3391,1668,1607,1590,1520,1480,1462,1175,1156,1081,1014,880,836,826,801cm <sup>-1</sup>
1-671	foam HINMR(CDCh.) & 2.61(a,311),2.73(a,311),3.21(a,311),3.23(a,311),3.78(a,311),5.32(a,211),6.84(a,1H),7.17(d,J=8.4Hz, HI),7.36(dd,J=8.4,2.111z,HI),7.38(d,J=8.7,Hz,211),7.43(d,J=2.111z,HI),7.68(d,J=8.7Hz,2H),8.46(a,1H),8.75(a,1H) IR(Nujol)1608,1519,1481,1463,1177,1151,1080,971,876,798cm <sup>-1</sup>
1.672	fonm HINMR(CDCh,) & 2.75(e,3H),3.21(e,3H),3.25(e,3H),3.55(e,3H),3.78(e,3H),5.37(e,2H),6.84(e,1H),7.17(d,J=8.4Hz,1H),7.36(dd ,J=8.4,2.1Hz,1H),7.38(d,J=8.7,Hz,2H),7.43(d,J=2.1Hz,1H),7.68(d,J=8.7Hz,2H),8.59(e,1H),8.92(e,1H) IR(Nujol)1608,1519,1480,1463,1177,1151,1080,971,876,798cm <sup>-1</sup>
1.673	foam 111NMR(CDCD,) & 2.70(6,3H),3.15(6,3H),3.21(6,3H),3.55(6,3H),3.78(6,3H),5.14(6,2H),6.77(m,2H),6.84(6,1H),7.19(m,2H),7.26 (d,J=8.4Hz,1H),7.37(d,J=2.1Hz,1H),7.38(dd,J=2.1,8.4Hz,1H),7.68(d,J=8.4Hz,2H)
1.674	m.p.153·156°C  1HNMR(CDCl <sub>3</sub> ) δ 2.18(8,3H),2.81(8,3H),3.18(8,3H),3.22(8,3H),3.55(8,3H),3.79(8,3H),5.14(8,2H),6.86(8,1H),7.18(dd,J=8.1,8.  1Hz,1H),7.24(d,J=8.1Hz,1H),7.26(d,J=8.4Hz,1H),7.36(d,J=1.8Hz,1H),7.38(d,J=8.4Hz,2H),7.39(dd,J=1.8,8.4Hz,1H),7.43(dd,J=8.1,8.1Hz,1H),7.67(d,J=8.4Hz,2H),7.90(d,J=8.1Hz,1H)  1R(KBf)3384,1689,1519,1481,1364,1177,1151,11079,970,874,798cm <sup>-1</sup>

Table 133

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40 45	111NMR(CDCE) & 2.76(s,3H),3.16(s,3H),3.22(s,3H),3.23(s,3H),3.55(s,3H),3.78(s,3H),5.23(s,2H),6.85(s,1H),7.23(dd,J=7.5,7.5Hz,1H),7.37(s,2H),7.38(d,J=8.4Hz,2H),7.43(m,3H),7.54(d,J=7.5Hz,1H),7.68(d,J=8.4Hz,2H)	IR(KBr)3435, 1609, 1519, 1481, 1364, 1177, 1152, 1079, 972, 876, 798cm <sup>-1</sup>	HINMR(CDCE) & 2.78(9,3H),3.03(9,3H),3.21(8,3H),3.45(9,6H),3.55(9,3H),3.79(9,3H),5.31(9,2H),6.84(9,1H),7.22(d,J=8.4Hz,	111),7.37(dd,J=2.4,8.411z,111),7.38(d,J=8.411z,211),7.42(m,2H),7.53(m,211),7.67(d,J=8.4Hz,2H),7.68(m,1H)	R(KBr)1609,1519,1481,1365,1176,1161,1080,973,875,799cm	m.p.153-156°C	111111111111111111111111111111111111	d,J=8.7Hz,1!!),7.31-7.46(m,5!!),7.38(d,J=8.4Hz,2!!),7.68(d,J=8.4Hz,2H),7.72(m,1H)	IR(KBr)1610,1519,1481,1365,1177,1149,1079,963,876,799cm <sup></sup>	111111111111111111111111111111111111	511z, 111), 7.16(d, J = 8.4Hz, 111), 7.17(d, J = 7.5Hz, 111), 7.30(dd, J = 2.1, 8.4Hz, 111), 7.32(dd, J = 7.5, 7.5Hz, 111), 7.37(d, J = 8.4Hz, 211), 7.31(d, J = 8.4Hz, 2	38(d,J=2.1Hz,1H),7.52(d,J=7.5Hz,1H),7.68(d,J=8.4Hz,2H)	IR(KBr)1609, 1519, 1480, 1365, 1235, 1177, 1151, 1079, 970, 874, 797cm <sup>-1</sup>	m.p.95-97°C	$^{1} \mathrm{HNMR}(\mathrm{CDCl_3}) \ \delta \ 1.76(s, 3H), 1.80(s, 3H), 3.03(s, 3H), 3.21(s, 3H), 3.56(s, 3H), 3.75(s, 3H), 4.63(d, J=6.9Hz, 2H), 4.93(s, 2H), 5.51(m, 3.75(s, 3H), 4.63(d, J=6.9Hz, 2H), 4.93(s, 2H), 5.51(m, 3.75(s, 3H), 4.63(s, 3H), 4.63(s, 3H), 4.93(s, 3H), 5.51(m, 3.75(s, 3H), 4.63(s, 3$	$1H), 6.66(s, 1H), 7.05(d, J=8.4Hz, 1H), 7.09 \cdot 7.17(m, 2H), 7.37(dd, J=2.4, 8.4Hz, 1H), 7.44(d, J=2.4Hz, 1H), 7.51 \cdot 7.58(m, 2H)$	IR(KBr)3435,2936,1605,1519,1475,1382,1365,1232,1161,1109,1080cm <sup>-1</sup>
35	.16(s,3H),3.22(s,	364,1177,1152,1	.03(s,311),3.21(s,	38(d,J=8.411z,211	176,1161,1080,9		.98(s,3H),3.17(s,	7.38(d,J=8.4Hz,	177,1149,1079,9	75(s,6H),3.17(s,3	17(d,J=7.5Hz,1H	Iz,1H),7.68(d,J=	235,1177,1151,10		30(s,3H),3.03(s,3	H),7.09-7.17(m,	175, 1382, 1365, 12
30	3H),3.23(s,3H) 3H),7.54(d,J=7	079,972,876,79	311),3.45(8,611)	I),7.42(m,2H),7	73,875,799cm		3H), 3.21(s, 3H)	2H),7.68(d,J=£	63,876,799cm	311), 3.21(8, 311)	I),7.30(dd,J=2.	8.4Hz,2H)	079,970,874,79		3H), 3.21(8, 3H),	2H),7.37(dd,J=	232,1161,1109,
25	,3.56(8,3H),3. <sup>7</sup> 7.5Hz,1H),7.68	38cm_1	,3.55(s,3H),3.	7.53(m,2H),7.6	_		,3.33(s,3H),3.	3.4Hz,2H),7.72	-	,3.55(8,311),3.7	1,8.4Hz,1H),7		7cm <sup>-1</sup>		3.56(s,3H),3.7	:2.4,8.4Hz,1H)	1080cm <sup>-1</sup>
20	78(s,3H),5.2 (d,J=8.4Hz,		79(s,3H),5.3	7(d,J=8.4H			56(a,3H),3.7	!(m,1H)		78(a,3H),5.3	.32(dd,J=7.				5(8,3H),4.63	,7.44(d,J=2	
15	3(s,2H),6.85( 2H)		1(8,211),6.84	z,2H),7.68(m			8(s,3H),5.44(			1(8,2H),6.83(	5,7.5Hz,1H),		-		(d,J=6.9Hz,2	4Hz,1H),7.5	
10	s, 1H), 7.23(dd, J=7.5,		(a,1H),7.22(d,J=8.4H	1H)			(s,2H),6.84(s,1H),7.2			s, 1H), 7.08(dd, J=7.5,	7.37(d,J=8.4Hz,2H),				;H),4.93(s,2H),5.51(r	1-7.58(m,2H)	

Table 134 .

1.680	m.p.142-144°C HINMR(CDCL3) & 1.76(s,311), 1.81(s,311), 3.07(s,311), 3.77(s,311), 3.74(s,311), 4.61(d,J=6.6Hz,211), 4.90(s,2H), 5.51(m,1H), 6.65(s, 1H), 6.66(s,111), 6.92(m,211), 7.03(m,1H), 7.09-7.17(m,2H), 7.52-7.58(m,2H) IR(KBr)3455, 2964, 2932, 1606, 1583, 1519, 1479, 1387, 1283, 1227, 1153, 1115, 1080, 1094, 1004cm
1.681	m.p.158-160°C HINMR((CDCL <sub>3</sub> ) & 1.76(s,3H),1.81(s,3H),3.20(s,3H),3.42(s,3H),3.76(s,3H),4.63(d,J=6.6Hz,2H),5.51(m,1H),6.04(s,1H),6.43(s, HI),7.07(d,J=8.4Hz,HI),7.11-7.19(m,2H),7.42(dd,J=2.1,8.4Hz,HI),7.50(d,J=2.1Hz,HI),7.58-7.65(m,2H) HR(KBr)3505,3440,1613,1522,1489,1386,1352,1292,1227.1109,1013cm <sup>-1</sup>
1-682	m.p.175-178°C <sup>1</sup> HNMR(CDCh <sub>3</sub> ) δ 1.63(e,3H), 1.92-2.13(m,4H),3.22(e,3H),3.42(e,3H),3.76(e,3H),4.13(t,J=6.3Hz,2H),6.04(e,1H),6.44(e,1H),7. <sup>1</sup> 06(d,J=8.4Hz,1H),7.11-7.19(m,2H),7.43(dd,J=2.1,8.4Hz,1H),7.49(d,J=2.1Hz,1H),7.57-7.65(m,2H) <sup>1</sup> 1R(KBr)3467,2973,2943,1613,1523,1489,1359,1232,1113,1072cm <sup>-1</sup>
1.683	powder IIINMR(CDCh) & 1.69(a,3H),1.75(a,3H),2.48·2.57(m,2H),3.08(a,3H),3.57(a,3H),3.74(a,3H),4.06(t,J=6.9Hz,2H),4.90(a,2H),5. 22(m,1H),5.64(a,1H),6.66(a,1H),6.91(m,2H),7.03(m,1H),7.08·7.17(m,2H),7.52·7.59(m,2H) IR(KBr)3432,2930,1604,1583,1518,1475,1382,1280,1249,1222,1160,1111,1082cm <sup>-1</sup>
1.684	m.p.151-153°C <sup>1</sup> HINMR(CDCl <sub>3</sub> ) δ 1.69(s,3H),1.73(s,3H),2.50-2.59(m,2H),3.19(s,3H),3.42(s,3H),3.76(s,3H),4.06(t,J=6.9Hz,2H),5.21(m,1H),6.02(s,1H),6.43(s,1H),7.05(d,J=8.4Hz,1H),7.11-7.19(m,2H),7.42(dd,J=2.4,8.4Hz,1H),7.50(d,J=2.4Hz,1H),7.57-7.65(m,2H) <sup>1</sup> 1R(KBr)3457,2937,1613,1523,1489,1465,1390,1361,1295,1234,1185,1110,1072,1013cm <sup>-1</sup>

Table 135

*55* 

50	45	40	35	30	25	20	15	. 10	5
1-685	m.p.156-158°C HINMR(CDCl <sub>3</sub> )	Ct. (Ct.) & 1.76(4,311), 1.81(4,311),3.21(4,311),3.42(4,311),3.76(4,311),4.54(4,4:711z,2H),7.29(4,J=8.7Hz,2H),7.37(4,J=8.7Hz,2H),7.71(4,J=8.7Hz,2H),7.11(4,J=8.7Hz,2H),1.517,1464,1360,1237,1150,1061,988,862cm	81(s,3H),3.21( 8.7Hz,2H),7.37 237,1150,1061	н,:311),:3.42(н,3 ?(d,J=8.7Hz,2l	H),3.76(s,3H) H),7.71(d,J=8	,4.54(d,J=6,9l	1z,211),5.52(6,	J=6.911z, 111),6.9	4(в, 1Н
1-686	m.p.189·191°C HINMR(CDCl3) & 3.21(9,3H),3.21(9,3H),3.42(9,3H),3.61(9,3H),3.76(8,3H),5.09(6,2H),6.94(9,1H),7.10(d,J=8.4Hz,2H),7.28·7.  48(m,9H),7.71(d,J=8.4Hz,2H)  IR(KBr)1727,1518,1469,1365,1239,1152,1061,865cm <sup>1</sup>	i 3.21(s,3H),3 J=8.4Hz,2H) 8,1469,1365,12	.21(8,3H),3.42( 239,115 <u>2,106</u> 1	(8,3H),3.61(s,5	HI),3.76(s,3H	),5.09(8,211),6.	94(8,111),7.10	(d,J=8.4Hz,2H),	7.28-7.
1.687	m.p.112-113°C HNMR(CDCl <sub>3</sub> ) \(\delta\) 1.68(s,3H), 1.74(s,3H), 2.50(q, J=7.2Hz,2H), 3.21(s,3H), 3.42(s,3H), 3.62(s,3H), 3.76(s,3H), 3.96(t, J=7.2Hz,2H), 5.23(t, J=7.2Hz,1H), 6.92(d, J=8.8Hz,2H), 7.28(d, J=8.8Hz,2H), 7.37(d, J=8.8Hz,2H), 7.71(d, J=8.8Hz,2H)  IR(KBr) 1735, 1519, 1469, 1361, 1246, 1153, 1059, 877, 861, 847, 791cm <sup>-1</sup>	1.68(s,3H),1. 1H),6.92(d,J=8	74(s,3H),2.50(c .8Hz,2H),6.93( 246,1153,1059	q,J=7.211z,2H (s,1H),7.28(d,, 877,861,847,	),3.21(s,3H),3 J=8.8Hz,2H), 791cm <sup>-1</sup>	7.37(d,J=8.8H;	(s,3H),3.76(s, z,2H),7.71(d,J	3H),3.96(t,J=7.2 J=8.8Hz,2H)	Hz,2H
I-688	m.p.191-193°C 1HNMR(I)MSO-d <sub>6</sub> ) δ 1.73(8,3H),1.76(8,3H),3.31(8,3H),3.71(8,3H),4.54(d,J=6,9Hz,2H),5.46(t,J=6.9Hz,1H),(8,1H),6.87(d,J=8.7Hz,2H),6.91(8,1H),6.92(d,J=8.7Hz,2H),7.19(d,J=8.7Hz,2H),7.48(d,J=8.7Hz,2H),9.59(8,1H),12.8(brs,1H) 1R(KBr)3462,1695,1609,1520,1472,1231,1177,1062,1001,837cm <sup>-1</sup>	6) & 1.73(8,3H) H),6.92(d,J=8. 5,1609,1520,14	),1.76(s,3H),3.: 7Hz,2H),7.19( 472,1231,1177,	31(s,3H),3.71( d,J=8.7Hz,2H	(s,3H),4.54(d,),7.48(d,J=8.'	J=6,9Hz,2H),5 7Hz,2H),9.59(8	.46(t,J=6.9Hz ,1H),12.8(brs	,1H),(s,1H),6.87 ,1H)	8=f,b)
1-689	m.p.229-232°C 'HNMR(DMSO-d <sub>6</sub> ) & 3.31(s,3H),3.71(s,3H),5.12(s,2H),6.87(d,J=8.8Hz,2H),6.98(s,1H),7.01(d,J=8.8Hz,2H),7.21(d,J=8.8Hz,2 H),7.34-7.50(m,7H),9.58(s,1H),12.8(brs,1H) IR(KBr)3424,3238,1685,1610,1521,1464,1379,1235,1180,1057,1001,826cm <sup>-1</sup>	°C SO-d <sub>6</sub> ) δ 3.31(a,3H),3.71(a,3H),5.12(a,2H),6.87(d,J=8.8Hz,2H),6.9 (m,7H),9.58(a,1H),12.8(bra,1H) 1,3238,1685,1610,1521,1464,1379,1235,1180,1057,1001,826cm <sup>-1</sup>	,3.71(s,3H),5.1 [2.8(brs,1H) 521,1464,1379	12(s,2H),6.87( 1235,1180,10	d,J=8.8Hz,2F	1),6.98(s,1H),7.	.01(d,J=8.8Hz	e,2H),7.21(d,J=8	.8Hz,2

Table 136

1-690	m.p.171.172°C 'HINMR(DMSO-da) δ 1.64(a,31D),1.70(a,31I),2.43(q,J=6.9Hz,21I),3.31(a,31I),3.70(a,31I),3.96(t,J=6.9Hz,21I),5.23(t,J=6.9Hz,1 H),6.87(d,J=8.8Hz,21I),6.91(d,J=8.8Hz,21I),6.98(a,1II),7.19(d,J=8.8Hz,21I),7.48(d,J=8.8Hz,21I),9.58(a,1H),12.8(brs,1H) IR(KBr)3402,3266,1689,1612,1521,1470,1376,1241,1181,1063,1001,829cm <sup>-1</sup>
1691	mp 191-193°C. HINMR(CDCh.) & 2.65(s,3H), 3.52(s,3H), 3.77(s,3H), 5.17(s,2H), 5.70(s,1H), 6.83(s,1H), 6.91(dd,J=1.8,8.1Hz,1H),7.00-7.05(m,2H), 7.10 -7.19 (m,2H), 7.34-7.45(m,5H),7.57-7.65(m,2H) R(KBr)3039,2934,1606,1523,1487,1391,1358,1290,1228,1077,1019,947,831,815,803cm <sup>-1</sup>
1.692	mp172-173°C "HNMR(CDCl <sub>13</sub> )
I-693	mp129-132°C 'HNMR(CDCl <sub>3</sub> ) δ 3.44(s,3H), 3.53(s,3H), 3.75(s,3H), 5.20(s,2H), 5.26(s,2H), 5.91(s,1H), 6.44(s,1H), 7.01(d,J=8.1Hz,1H), 7.08 (dd, J=1.8Hz, 8.1Hz,1H), 7.11-7.18(m,2H),7.28-7.50(m,6H),7.57-7.64(m,2H) IR(KBr)2996,2962,2932,2895,1609,1522,1488,1229,1120,1076,999,911,815,724,582cm <sup>-1</sup>
I-694	mp124-126°C 'HNMR(CDCl <sub>3</sub> )

Table 137

55

5 10 15	=8.4,2.1Hz,1H), 6.97-7.00(m,2H), 7.07-	np 178-180°C HNMR(CDCL <sub>3</sub> ) & 2.75(s, 3H), 3.18(s, 3H), 3.55(s, 3H), 3.76(s, 3H), 5.18(s, 2H), 5.72(s, 1H), 6.87(s, 1H), 7.00(d, J=8.7Hz, 1H), 7.15 (dd, J=8.7, 2.1Hz, 1H), 7.24-7.28(m, 2H), 7.36-7.50(m, 8H) R(CHCl <sub>3</sub> )3543,3027,2939,1519,1481,1371,1330,1254,1204,1177,1150,1082,1005,969,873 <sub>500</sub> .1	7.25-7.50(m,9H) 57,882,840,816cm <sup>-1</sup>	mp124·125°C HNMR(CDCl <sub>3</sub> ) & 1.77(s,3H), 1.81·1.82(d,J=0.9Hz,3H), 2.24(s,3H), 2.28(s,3H), 3.22(s,3H), 4.63(d,J=6.6Hz,2H), 5.52(m,1H), 7.04·7.14(m,5H), 7.24·7.34(m,4H) R(KIbr)2978,2924,2868,1893,1771,1604,1520,1489,1368,1290,1261,1169,1109,1046,973,957,882,740,816cm <sup>-1</sup>	,3H), 2.55(m,2H), 3.21(a,3H), 4.05-73,958,878,840,819cm <sup>-1</sup>	.14(m,4H), 7.21-7.37(m,9H)
25 30	mp141-142°C. 4HNMR(CDCla) & 2.34(s,311), 2.48(s,311), 5.16(s,211), 5.70(s,111), 6.82(dd,J=8.4,2.1112,111), 6.97 7.13(m,411), 7.32-7.46(m,711) HRCHCHCla)3543.3023.2871,1604,1587,1520,1489,1469,1383:1267,1243,1158,1126.1014,957,877,8396	mp178-180°C HINMR(CDCh) & 2.75(s,3H), 3.18(s,3H), 3.55(s,3H), 3.76(s,3H), 5.18(s,2H), 5.72(s,1H), 6.8 7.15 (dd, J=8.7, 2.1Hz,1H), 7.24-7.28(m,2H), 7.36-7.50(m,8H) IR(CHCh)3543.3027.2939.1519.1481.1371.1330.1254.1204.1177.1150.1082.1005.969.873	mp 129-130°C !HNMR(CDCI:) δ 2.24(s,3H), 2.29(s,3H), 3.12(s,3H), 5.18(s,2H), 7.08-7.14(m,5H), 7.25-7.50(m,9H) [R(CHCI:)2925,2871,1604,1520,1490,1455,1369,1291,1262,1169,1111,1007,972,957,882,840,816cm <sup>-1</sup>	mp124·125℃ !HNMR(CDC!:) & 1.77(s,3H), 1.81·1.82(d,J=0.9Hz,3H), 2.24(s,3H), 2.28(s,3H), 3.22(s,3H), 4.63(d,J=6.6Hz,2H) 7.04·7.14(m,5H), 7.24·7.34(m,4H) !R(KBr)2978,2924,2868,1893,1771,1604,1520,1489,1368,1290,1261,1169,1109,1046,973,957,882,740,816cm	oil <sup>1</sup> HNMR(CDCl <sub>3</sub> )	mp121-123°C 'HNMR(CDCl <sub>3</sub> ) ô 2.24(s,3H), 2.83(s,3H), 2.98(s,3H), 3.11(s,3H), 5.13(s,2H), 7.08-7.14(m,4H), 7.21-7.37(m,9H) <u>IR(CHCl<sub>3</sub>)2925,1605,1520,1489,1369,1262,1169,1014,1003,972,957,882,840,816cm<sup>-1</sup></u>
35	8,311), 2.48(8,311), 5 H)	H), 3.18(s,3H), 3.55( , 7.24-7.28(m,2H), 7.3	(H), 2.29(s,3H), 3.12(s,	H), 1.81-1.82(d,J=0.9F (m,4H) 893,1771,1604,1620,14	1.69(s,3H), 1.74-1.75(d,J=0.9Hz,3H), .22(m,1H), 7.03-7.14(m,5H), 7.24-7.34(m 2875,1605,1520,1490,1470,1368,1292,12	H), 2.83(s,3H), 2.98(s,3
45	mp141-142°C 4HNMR(CDCla) & 2.34(s,3H), 2.48(s,3H), 5.16(s,2H), 7.13(m,4H), 7.32-7.46(m,7H) HRCHCh(3)3543.3023.2871,1604,1687,1520,1489,1469,1383	mp178-180°C HINMR(CDCl <sub>3</sub> ) & 2.75(s,3H), 3.18(s,3H), 3.55(s,3H), 3.76(s, 7.15 (dd, J=8.7, 2.1Hz,1H), 7.24-7.28(m,2H), 7.36-7.50(m,8H) IR(CHCl <sub>3</sub> )3543.3027.2939,1519,1481,1371,1330,1254,1204,1	mp129-130°C 'HNMR(CDC!;) δ 2.24(s,3 IR(CHCl:)2925,2871,1604	mp124-125°C 'HNMR(CDCl <sub>3</sub> ) & 1.77(s,3H), 1.8' 7.04-7.14(m,5H), 7.24-7.34(m,4H) IR(KBr)2978,2924,2868,1893,177	oil <sup>1</sup> HNMR(CDCl <sub>3</sub> )	mp121-123℃ 'HNMR(CDCi3) δ 2.24(¢,3] IR(CHCi3)2925,1605,1520,
50	1117 1-695 7.13	dm 11.7 1.1.7 11.0	mp m l.697 HN IR(6	1.698   HN 1.04	oil 'HN 1-699 4.10	mp1

Table 138

1.701	mp 215-217 °C. HI NMR (CDCB.) & 2.73 (s, 3H), 3.13 (s, 3H), 3.18 (s, 3H), 3.57 (s, 3H), 3.78 (s, 3H), 5.20 (s, 2H), 6.86 (s, 1H), 7.16 (d, J = 8.7 Hz, 1H), 7.35-7.50 (m, 9H), 7.56 (dd, J = 8.4, 2.4 Hz, 1H), 7.62 (d, J = 2.4 Hz, 1H)  H. CHCB. 2939 1613 1619, 1480, 1371, 1294, 1264, 1176, 1160, 1119, 1083, 1003, 970, 871, 849, 816 cm <sup>-1</sup>
1-702	mp 71-73 °C  1H NMR (CDCl <sub>3</sub> )
1.703	oil <sup>1</sup> H NMR (CDCl <sub>3</sub> ) δ 1.69 (s, 3H), 1.75-1.76 (d, J = 0.9 Hz, 3H), 2.24 (s, 3H), 2.28 (s, 3H), 2.50-2.57 (td, J = 6.9, 6.3 Hz, 2H), <sup>4.05-4.10</sup> (t, J = 6.3 Hz, 2H), 5.24 (m, 1H), 5.70 (s, 1H), 6.81 (dd, J = 8.4, 1.8 Hz, 1H), 6.90 (d, J = 8.4 Hz, 1H), 6.96 (d, J = 1.8 Hz, 1H), 7.06-7.13 (m, 4H), 7.26-7.34 (m, 2H) <sup>1</sup> Hz, 1H), 7.06-7.13 (m, 4H), 7.26-7.34 (m, 2H) <sup>1</sup> Hz, 1H, 7.06-7.13 (m, 4H), 7.26-7.34 (m, 2H)
1.704	mp 113-115 °C  1H NMR (CDCl <sub>3</sub> )

Table 139

foam 111 NMR (CDCta)	(CDCb) δ 3.20 (s, 3H), 3.27 (s, 3H), 3.43 (s, 3H), 3.73 (s, 3H), 4.37 (br d, J = 5.7 Hz, 2H), 4.58 (s, 2H), 5.16 (s, (s, 1H), 6.82 (dd, J = 8.2, 1.7 Hz, 1H), 6.88 (s, 1H), 6.97 (d, J = 1.7 Hz, 1H), 6.98 (d, J = 8.2 Hz, 1H), 7.35-7.47 (m, (d, J = 8.7 Hz, 2H)) 3464, 1515, 1474, 1369, 1230, 1199, 1176, 1149, 1039, 873 cm <sup>-1</sup>
foam 411 NMR (CDCla) - 8-2-42 (ba 111), 7.15 (d, J = 8.6 Hz, 114), 1R (KBr) 3583, 3435, 1519, 1	foam III NMR (слуды)
mp 120-121 °C 111 NMR (CDCL.)  \delta  3.45 (s, 6.47 (s, 1H), 6.96 (dd, J = 8.4 8.4 Hz, 2H) IR (KBr) 3504, 3461, 1522, 1.	mp 120-121 °C.  11 NMR (CDCE) 5 3.45 (s, 311), 3.45 (s, 311), 3.75 (s, 311), 4.66 (s, 211), 4.77 (s, 211), 5.15 (s, 211), 5.67 (s, 111), 5.91 (s, 111), 6.96 (dd, J = 8.4, 1.9 Hz, 111), 7.03 (d, J = 8.4 Hz, 111), 7.09 (d, J = 1.9 Hz, 111), 7.37-7.47 (m, 711), 7.64 (d, J = 8.4 Hz, 211)  8.4 Hz, 211  11 (KBr) 3504, 3461, 1522, 1485, 1466, 1384, 1466, 1384, 1283, 1245, 1110, 1042, 925, 812, 749 cm.
mp 156-158 °C 1H NMR (CDCl <sub>3</sub> ) δ 3.11 (s, 6.88 (s, 1H), 7.12 (d, J = 8.7 F IR (KBr) 1514, 1469, 1360, 1	mp 156-158 ℃ 1H NMR (CDCl <sub>3</sub> ) δ 3.11 (s, 3H), 3.21 (s, 3H), 3.28 (s, 3H), 3.42 (s, 3H), 3.73 (s, 3H), 4.38 (s, 2H), 4.58 (s, 2H), 5.18 (s, 2H), 6.88 (s, 1H), 7.12 (d, J = 8.7 Hz, 1H), 7.27 (dd, J = 8.7, 2.1 Hz, 1H), 7.35-7.50 (m, 8H), 7.70 (d, J = 8.7 Hz, 2H) IR (KBr) 1514, 1469, 1360, 1177, 1149, 1099, 1042, 870 cm. <sup>1</sup>
mp 188-190 °C 1H NMR (CDCl <sub>3</sub> ) δ 1.70 (t, 5.91 (s, 1H), 6.47 (s, 1H), 6.90 7.65 (d, J = 8.4 Hz, 2H) IR (KBr) 3547, 3492, 3451, 11	mp 188-190 °C <sup>1</sup> H NMR (CDCl <sub>3</sub> ) δ 1.70 (t, J = 5.7 Hz, 1H), 3.45 (s, 3H), 3.75 (s, 3H), 4.77 (d, J = 5.7 Hz, 2H), 5.16 (s, 2H), 5.68 (s, 1H), <sup>1</sup> 5.91 (s, 1H), 6.47 (s, 1H), 6.96 (dd, J = 8.5, 1.7 Hz, 1H), 7.03 (d, J = 8.5 Hz, 1H), 7.09 (d, J = 1.7 Hz, 1H), 7.37-7.48 (m, 7H), <sup>1</sup> 7.65 (d, J = 8.4 Hz, 2H) <sup>1</sup> 1R (KBr) 3547, 3492, 3451, 1521, 1487, 1385, 1288, 1249, 1209, 1108, 1011, 746, 702 cm <sup>-1</sup>
7.65 (d, J = 8.4 Hz, 2H) IR (KBr) 3547, 349 <u>2, 3451, 1</u> 1	521, 1487, 1385, 1288, 1249, 1209, 1108, 1011, 746, 702

Table 140

	mp 178-180 °C
	HI NMR (CDCMs) & 2.43 (br s, 1H), 3.44 (s, 3H), 3.72 (s, 3H), 4.52 (m, 2H), 4.93 (s, 1H), 5.15 (s, 2H), 5.70 (s, 1H), 6.79 (dd,
1-710	J = 8.1, 2.1 Hz, 1H), 6.84 (s, 1H), 6.92 (d, J = 8.7 Hz, 2H), 6.93 (d, J = 2.1 Hz, 1H), 7.00 (d, J = 8.7 Hz, 1H), 7.38.7.48 (m,
	511), $7.54 (d, J = 9.0 \text{ Hz}, 211)$
	IR (KBr) 3447, 3214, 1609, 1518, 1477, 1459, 1391, 1260, 1221, 1008, 984, 833, 799, 751 cm <sup>-1</sup>
	նուո
•	111 NMR (CDCL) & 2.85 (4, 311), 3.22 (4, 311), 3.30 (4, 311), 3.54 (4, 311), 3.78 (8, 311), 5.02 (8, 211), 6.85 (8, 111), 7.08 (d, J =
=	8.4 Hz, 111), 7.32 (d, J = 2.1 Hz, 111), 7.37 (dd, J = 8.4, 2.1 Hz, 111), 7.39 (d, J = 8.7 Hz, 2H), 7.67 (d, J = 8.7 Hz, 211)
	IR (Nujol) 3423, 3320, 3215, 1610, 1519, 1480, 1454, 1176, 1151, 1080, 969, 876, 798 cm <sup>-1</sup>
	form
7	111 NMR (CDCl <sub>3</sub> ) 6 2.62 (s, 3H), 3.45 (s, 3H), 3.74 (s, 3H), 5.28 (s, 2H), 6.45 (s, 1H), 6.92 (d, J = 8.7 Hz, 2H), 6.95 (dd, J =
1-712	8.4, 2.1 Hz, 1H), 7.10 (d, J = 8.4 Hz, 1H), 7.11 (d, J = 2.1 Hz, 1H), 7.53 (d, J = 8.7 Hz, 2H), 8.50 (brs, 1H), 8.60 (brs, 1H)
	IR (Nujol) 3207, 1611, 1589, 1523, 1489, 1460, 1227, 1116, 1072, 1014, 943, 822, 759 cm <sup>-1</sup>
	mp 231-233°C
	III NMR (CDCl <sub>3</sub> ) δ 3.30 (8, 3H), 3.64 (8, 3H), 5.28 (8, 2H), 6.39 (8, 1H), 6.67 (dd, J = 8.4, 2.1 Hz, 1H), 6.80 (d, J = 2.1 Hz,
1.713	1H), 6.84 (d, J = 8.7 Hz, 2H), 7.01 (d, J = 8.4 Hz, 1H), 7.44 (d, J = 8.7 Hz, 2H), 8.64 (d, J = 2.4 Hz, 1H), 8.67 (dd, J = 2.4, 1.2
	Hz, 111), 8.94 (d, $J = 1.2 \text{ Hz}$ , 1H)
	IR (Nujol) 3369, 3164, 1612, 1600, 1586, 1522, 1493, 1386, 1255, 1118, 1073, 1013, 934, 824, 798, 778 cm <sup>-1</sup>
	foam
1 212	1H NMR (CDCl <sub>3</sub> ) δ 2.83 (s, 3H), 3.22 (s, 3H), 3.27 (s, 3H), 3.55 (s, 3H), 3.78 (s, 3H), 5.18 (s, 2H), 6.85 (s, 1H), 7.20 (d, J = 3.1)
** / · ·	8.4 Hz, 1H), 7.39 (d, J = 8.7 Hz, 2H), 7.40 (dd, J = 8.4, 2.1 Hz, 1H), 7.45 (d, J = 2.1 Hz, 1H), 7.67 (d, J = 8.7 Hz, 2H)
	IR (Nujol) 3264, 1650, 1607, 1517, 1480, 1175, 1160, 1078, 946, 876, 798 cm. 1

Table 141

50	45	40	35	30	25	20	15	10 .	5
		) § 2.76 (s, 3H)	), 2.77 (s, 3H),	3.21 (s, 3H),	3.24 (s, 3H), 3	1.55 (s, 3H), 3.7	78 (s, 3H), 5.3	foam H NMR (CDCl <sub>3</sub> )	1H),
1.715	7.25 (d, J =     211)   R (Nuich) 1	8.4 Hz, 1H), 7.38 (d, J = 8.7 Hz, 2H), 7.38 (dd, J = 8.4, 2.1 Hz, 1H), 7.5007 1578 1519 1465 1176 1151 1070 071 047 876 846 707 2007	J = 8.7 Hz, 2H	l), 7.38 (dd, J	= 8.4, 2.1 Hz,	, 1H), 7.44 (d,	J = 2.1 Hz, 1F	8.4 Hz, 1HJ, 7.38 (d, J = 8.7 Hz, 2H), 7.38 (dd, J = 8.4, 2.1 Hz, 1H), 7.44 (d, J = 2.1 Hz, 1H), 7.68 (d, J = 8.7 Hz,	Hz,
1.716	<u> </u>	1°C MSO-da) & 2.87 (a, 311), 3.39 (a, 311), 3.45 (a, 311), 3.52 (a, 311), 3.79 (a, 311), 5.23 (a, 211), 7.08 (a, 111), 7.3 I), 7.35 (dd, J = 8.4, 2.1 Hz, 111), 7.44 (d, J = 8.4 Hz, 111), 7.49 (d, J = 8.7 Hz, 211), 7.74 (d, J = 8.7 Hz, 211) 276, 1651, 1605, 1520, 1480, 1463, 1174, 1150, 1079, 947, 879, 798 cm <sup>-1</sup>	3H), 3.39 (s, 3H), 2.1 Hz, 1H), 7.4	(l), 3.45 (s, 31) (d, J = 8.4)	I), 3.52 (s, 3HI Hz, 1H), 7.49 079, 947, 879	(d, J = 8.7 Hz,	5.23 (s, 2H), '	mp 227-229 °C <sup>1</sup> H NMR (DMSO-d <sub>6</sub> ) δ 2.87 (a, 3H), 3.39 (a, 3H), 3.45 (a, 3H), 3.52 (a, 3H), 3.79 (a, 3H), 5.23 (a, 2H), 7.08 (a, 1H), 7.33 (d, J = 2.1 Hz, 1H), 7.35 (dd, J = 8.4, 2.1 Hz, 1H), 7.44 (d, J = 8.4 Hz, 1H), 7.49 (d, J = 8.7 Hz, 2H), 7.74 (d, J = 8.7 Hz, 2H) <sup>1</sup> HR (Nuiol) 3276, 1651, 1605, 1520, 1480, 1463, 1174, 1150, 1079, 947, 879, 798 cm <sup>-1</sup>	(d, J
1.717	m.p 180·181°C  14 NMR (CDCl <sub>3</sub> ) δ 3.07 (s, 3H), 3.45 (s, 3H), 3.75 (s, 3H), 5.18 (s, 2H), 6.45 (s, 1H),6.92 (d, J= 8.7 Hz, 2H), 6.99 (dd, J= 1.8, 8.4 Hz, 1H), 7.08 (d, J= 1.8 Hz, 1H), 7.10 (d, J= 8.4 Hz, 1H), 7.25 (t, J= 7.2 Hz, 1H), 7.44 (m, 2H), 7.53 (d, J= 8.7 Hz, 2H), 7.61 (d, J= 8.1 Hz, 1H)	7.08 (d, J = 1.8	), 3.45 (s, 3H), Hz, 1H), 7.10 (	3.75 (s, 3H), d, J= 8.4 Hz,	6.18 (s, 2H), 11H), 7.25 (t, e	6.45 (s, 1H),6.: J = 7.2 Hz, 1H	92 (d, J= 8.7 l	m.p 180·181°C <sup>1</sup> H NMR (CUCl <sub>3</sub> ) δ 3.07 (s, 3H), 3.45 (s, 3H), 3.75 (s, 3H), 5.18 (s, 2H), 6.45 (s, 1H),6.92 (d, J= 8.7 Hz, 2H), 6.99 (dd, J= 1.8, R.4 Hz, 1H), 7.08 (d, J= 1.8 Hz, 1H), 7.10 (d, J= 8.4 Hz, 1H), 7.25 (t, J= 7.2 Hz, 1H), 7.44 (m, 2H), 7.53 (d, J= 8.7 Hz, 2H), 7.61 (d, J= 8.1 Hz, 1H)	J = Hz,
1.718	foam  1H NMR (CDCl <sub>3</sub> ) \( \delta \) 3.06 (s, 3H), 3.45(s, 3H), 3.74(s, 3H), 5.17 (s, 2H), 6.45 (s, 1H), 6.93 (d, J= 8.7 Hz, 2H), 6.98 (dd, J= 8. Hz, 1H), 7.08 (d, J= 2.1 Hz, 1H), 7.10 (d, J= 8.4 Hz, 1H), 7.24 (m, 1H), 7.43 (m, 2H), 7.51 (d, J= 8.7 Hz, 2H), 7.61 (m, 1H) (KBr) 3430, 1611, 1590, 1623, 1490, 1402, 1323, 1242, 1149, 1112, 1070, 1010, 971, 826 cm <sup>-1</sup>	δ 3.06 (s, 3H), J = 2.1 Hz, 1H),	7.10 (d, J = 8.4 1490, 1402, 13	.74(s, 3H), 5. t Hz, 1H), 7.2 123, 1242, 11	17 (s, 2H), 6.4 14 (m, 1H), 7.4 49, 1112, 1070	6 (s, 1H), 6.93 13 (m, 2H), 7.5 2, 1010, 971, 8	(d, J= 8.7 Hz, 1 (d, J= 8.7 H. 26 cm. <sup>1</sup>	DCl <sub>3</sub> ) δ 3.06 (9, 3H), 3.45(9, 3H), 3.74(9, 3H), 5.17 (9, 2H), 6.45 (9, 1H), 6.93 (d, J= 8.7 Hz, 2H), 6.98 (dd, J= 8.7 8 (d, J= 2.1 Hz, 1H), 7.10 (d, J= 8.4 Hz, 1H), 7.24 (m, 1H), 7.43 (m, 2H), 7.51 (d, J= 8.7 Hz, 2H), 7.61 (m, 1H) 30, 1611, 1590, 1623, 1400, 1402, 1323, 1242, 1149, 1112, 1070, 1010, 971, 826 cm <sup>-1</sup>	8.7 E)
1.719	foam  1H NMR (CDCl <sub>3</sub> )	δ 2.80 (s, 6H), J = 8.7 Hz, 1H), 11, 1585, 1522,	, 3.47 (s, 3H), 3 7.20 (d, J = 7.2 1488, 1404, 12	3.76 (e, 3H), 6 2. Hz, 1H), 7.3 24, 1113, 100	.08 (s 2H), 6.4 4-7.45 (m, 3H	16 (e, 1H), 6.92 ), 7.55 (d, J = 1 824, 767 cm <sup>-1</sup>	2 (d, J= 8.7 Hz 8.7 Hz, 2H)	, 3H), 7.10 (d, J =	2.1

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Table 142

1.720	foam 111 NMR (CDCh) & 1.52 (s, 911), 2.67 (s, 311), 3.19 (s, 311), 3.21 (s, 311), 3.56 (s, 311), 3.78 (s, 311), 5.17 (s, 211), 6.54 (br.s, 111), 7.11 (m, 111), 7.12 (d, J = 9.0 Hz, 111), 7.25 (m, 111), 7.30 (d, J = 7.5 Hz, 114), 7.32 (dd, J = 1.8, 9.0 Hz, 111), 7.36 (d, J = 8.7 Hz, 211), 7.41 (d, J = 1.8 Hz, 114), 7.60 (s, 111), 7.67 (d, J = 8.7 Hz, 211) 11 (KBz) 1724, 1610, 1520, 1481, 1366, 1234, 1177, 1153, 1079, 969, 875, 797 cm <sup>-1</sup>
1.721	m.р 187-191 °C. (с. р.с.); 3. С. б. б. (ж. 311), 3. С. б. б. (ж. 311), 3. С. б.
27.1	m.p 143·146 °C 111 NMR (CDCl <sub>3</sub> )
1.723	foam 111 NMR (CI)Cl;1) 6 2.86 (s, 3H), 3.00 (s, 3H), 3.22 (s, 3H), 3.55 (s, 3H), 3.78 (s, 3H), 5.22 (s, 2H), 6.59 (s, 1H), 6.85 (s, 1H), 7.10 (d, J = 8.4 Hz, 1H), 7.25 (m, 3H), 7.32 (d, J = 2.1, 8.7 Hz, 1H), 7.37 (m, 1H), 7.38 (d, J = 2.1 Hz, 1H), 7.38 (d, J = 8.7 Hz, 1H), 7.67 (d, J = 8.7 Hz, 2H) 1R), 7.67 (d, J = 8.7 Hz, 2H)

Table 143

	ı	)		)		)	5	,	
1-724	foam 11 NMR (CDCh.) & 2.74 (s, 3H), 3.18 (s, 3H), 3.21 (s, 3H), 3.43 (s, 6H), 3.56 (s, 3H), 3.78 (s, 3H), 5.24 (s, 2H), 6.84 (s, 1H), 7.13 (d, J= 8.4 Hz, 1H), 7.36 (dt, J= 2.1, 8.4 Hz, 1H), 7.37 (m, 1H), 7.39 (d, J= 8.7 Hz, 2H), 7.40 (d, J= 2.1 Hz, 1H), 7.51 (m, 2H), 7.61 (s, 1H), 7.67 (d, J= 8.7 Hz, 2H) 11 (k, 1H), 7.67 (d, J= 8.7 Hz, 2H) 11 (k, 1H), 7.67 (d, J= 8.7 Hz, 2H)	δ 2.74 (s, 3H] 1H), 7.36 (dt, .67 (d, J = 8.7	J. 3.18 (s, 3H), J = 2.1, 8.4 Hz Hz, 2H)	3.21 (s, 3H), ;, 1H), 7.37 (m	3.43 (s, GH), 3. , 1H), 7.39 (d,	66 (s, 3H), 3.78 J = 8.7 Hz, 2H)	(s, 3H), 5.24 (g	8, 2H), 6.84 (	s, 1H), .51 (m,
1.725	m.p 147-150 °C HI NMR (CDCh.) & 2.79 (s, 3H), 2.83 (s, 3H), 3.20 (s, 3H), 3.21 (s, 3H), 3.35 (s, 3H), 3.55 (s, 3H), 3.78 (s, 3H), 5.22 (s, 2H), 6.85 (s, 1H), 7.11 (d, J = 8.7 Hz, 1H), 7.32-7.46 (m, 7H), 7.62 (s, 1H), 7.67 (d, J = 8.4 Hz, 2H) IR (KBr) 1608, 1518, 1480, 1364, 1178, 1163, 1077, 968, 795 cm. <sup>1</sup>	δ 2.79 (s, 3H) 1, J = 8.7 Hz, 8, 1480, 1364	), 2.83 (s, 311), 1H), 7.32-7.46 , 1178, 1153, 1	3.20 (s, 3H), (m, 7H), 7.62	3.21 (s, 3H), 3. (s, 1H), 7.67 (cm.1	36 (s, 3H), 3.56 1, J = 8.4 Hz, 2l	(s, 3H), 3.78 (s	s, 3H), 6.22 (	s, 2H),
1.726		δ 2.85 (s, 3H I, J = 8.1 Hz, 1 2H) 9, 1480, 1360	), 2.91 (s, 6H), IH), 6.89 (s, 1H	3.36 (s, 3H), I), 7.07 (s, 1H 081, 879, 826	3.45 (s, 3H), 3 ), 7.20 (t, J = 8	51 (s, 3H), 3.76	(s, 3H), 5.19 (	(a, J = 8.7 H	(d, J = z, 2H),
1.727	form 1H NMR (CDCl <sub>3</sub> ) & 2.82 (s, 3H), 3.18 (s, 6H), 3.21 (s, 3H), 3.53 (s, 3H), 3.76 (s, 3H), 5.17 (s, 2H), 6.84 (s, 1H), 7.11 (d, J = 8.4 Hz, 1H), 7.20 (d, J = 4.8 Hz, 1H), 7.30-7.47 (m, 8H), 7.76 (d, J = 8.7 Hz, 2H) 1R (KBr) 3430, 1677, 1609, 1519, 1481, 1364, 1202, 1177, 1150, 1079, 876, 799 cm <sup>-1</sup>	<ul><li>6 2.82 (s, 3H</li><li>1, J = 4.8 Hz,</li><li>7, 1609, 1519</li></ul>	), 3.18 (s, 6H), 1H), 7.30-7.47 , 1481, 1364, 1	3.21 (s, 3H), (m, 8H), 7.76 202, 1177, 11	3.53 (s, 3H), 3 (d, J = 8.7 Hz, 50, 1079, 876,	76 (s, 3H), 5.17 2H) 799 cm <sup>-1</sup>	(8, 2H), 6.84 (	(e, 1H), 7.11	(d, J =
1.728	fontm 1. NMR (CDCl <sub>3</sub> ) δ 3.45 (s, 3H), 3.75 (s, 3H), 5.06 (s, 2H), 6.45 (s, 1H), 6.68 (d, J = 7.5 Hz, 1H), 6.77 (s, 1H), 6.82 (d, J = 7.5 Hz, 1H), 6.91 (d, J = 8.7 Hz, 2H), 6.93 (dd, J = 1.8, 8.4 Hz, 1H), 6.99 (d, J = 8.4 Hz, 1H), 7.07 (d, J = 1.8 Hz, 1H), 7.19 (t, J = 7.5 Hz, 1H), 7.54 (d, J = 8.7 Hz, 2H)  7.5 Hz, 1H), 7.54 (d, J = 8.7 Hz, 2H)  11. (KBr) 3413, 1611, 1622, 1488, 1461, 1405, 1251, 1119, 1076, 1007, 813, 784 cm <sup>-1</sup>	6 3.45 (s, 3H) = 8.7 Hz, 2H), 1, J = 8.7 Hz, ?	, 3.75 (s, 3H), ( , 6.93 (dd, J = ) 2H)	5.06 (s, 2H), 6 1.8, 8.4 Hz, 11 251, 1119, 10	.45 (s, 1H), 6.6 H), 6.99 (d, J = 76, 1007, 813,	8 (d, J = 7.5 Hz 8.4 Hz, 1H), 7.7	7, 1H), 6.77 (s, 1) 77 (d, J = 1.8 H	IH), 6.82 (d. 1z, 1H), 7.19	J = 7.5 (t, J =

Table 144

II.729 (a. J = 1.8 Hz, 1H), 6.96  III (KBr) 3434, 1612, 1692, 18 (b. Hz, 1H), 6.96  III (KBr) 3434, 1612, 1692, 1 H (KBr) 3439, 2937, 1694, 11 KKBr)	
	11 NMR (CDCl <sub>3</sub> ) & 3.01 (s, 3H), 3.45 (s, 3H), 3.75 (s, 3H), 5.16 (s, 2H), 6.45 (s, 1H), 6.81 (s, 1H), 6.92 (d, J = 8.7 Hz, 2H),
	1.8 Hz, 1H), 6.96 (m, 2H), 7.24 (m, 2H), 7.40 (t, J = 7.2 Hz, 1H), 7.52 (d, J = 8.7 Hz, 2H)
	IR (KBr) 3431, 1612, 1592, 1623, 1489, 1325, 1248, 1224, 1147, 1113, 1070, 1010, 972 cm <sup>-1</sup>
<u> </u>	111 NMR (CDCL <sub>3</sub> ) & 2.34 (s, 6H), 3.48 (s, 3H), 3.76 (s, 3H), 4.72 (brs, 1H), 5.16 (s, 2H), 5.68 (brs, 1H), 5.93 (brs, 1H), 6.44
	(s, 111), 6.99-7.10 (m, 311), 7.26-7.49 (m, 711)
	67, 2933, 1613, 1701, 1517, 1482, 1454, 1424, 1389, 1321, 1196, 1148, 1113, 1073 cm <sup>-1</sup>
	1H NMR (CDCl3) & 3.20 (a, 3H), 3.81 (a, 6H), 5.14 (a, 2H), 5.65 (bra, 1H), 6.79 (a, 2H), 6.79-7.02 (m, 5H), 7.36-7.46 (m,
IR(KBr) 3439, 28 mp196-197 C	= 8.6 Hz, 2H)
mp196-197 C	IR(KBr) 3439, 2937, 1594, 1567, 1523, 1487, 1351, 1240, 1202, 1146, 1126, 874 cm <sup>-1</sup>
•	
	1H NMR (DMSO-d <sub>6</sub> ) δ 3.32 (s, 3H), 3.43 (s, 6H), 3.79 (s, 6H), 5.24 (s, 2H), 7.00 (s, 2H), 7.23-7.30 (m, 3H), 7.35-7.55 (m,
1.732   7H, 7.88 (d, J = 8.4 Hz, 2H)	= 8.4 Hz, 2H)
IR(KBr) 3434, 10	IR(KBr) 3434, 1602, 1561, 1523, 1485, 1362, 1288, 1238, 1201, 1181, 1148, 1126, 1115, 966, 914, 813 cm <sup>-1</sup>
mp202·203 C	
H NMR (D	MSO-dg) & 2.40 (s, 6H), 3.31 (s, 3H), 3.34 (s, 3H), 3.51 (s, 3H), 3.58 (s, 3H), 3.77 (s, 3H), 5.27 (s, 2H), 7.03 (s,
111), 7.32-7.530 (m, 10H)	(m, 10H)
IR(KBr) 3434, 30	34, 3028, 2944, 1515, 1475, 1463, 1361, 1290, 1272, 1247, 1179, 1085, 967, 815, 804 cm <sup>-1</sup>

Table 145

1-734	mp140-141 ℃ <sup>1</sup> H NMR (CDCh <sub>3</sub> ) δ 1.77 (s, 3H), 1.82 (s, 3H), 3.21 (s, 3H), 3.83 (s, 6H), 4.63 (d, J = 4.6 Hz, 2H), 5.52-5.53 (m, 1H), 6.79 (s, 2H), 7.05 (d, J = 8.8 Hz, 1H), 7.29-7.42 (m, 4H), 7.67 (d, J = 8.6 Hz, 2H) <sup>1</sup> R(KBr) 3434, 2936, 1602, 1565, 1487, 1365, 1242, 1182, 1152, 1123, 1113, 974, 874, 811 cm <sup>-1</sup>
1-736	mp168-169 ℃ HI NMR (CDCl <sub>3</sub> )
1.736	mp 192-194 ℃ 11 NMR (CDCL <sub>3</sub> ) δ 1.77 (s, 3H), 1.82 (s. 3H), 2.47 (s, 6H), 2.72 (s, 3H), 3.24 (s, 3H), 3.36 (s, 3H), 3.57 (s, 3H), 3.79 (s, 3H), 4.64 (d, J = 6.6 Hz, 2H), 5.47-5.55 (m, 1H), 6.83 (s, 1H), 7.09 (d, J = 9.0 Hz, 1H), 7.33-7.40 (m, 4H) 1R(KBr) 3435, 1942, 1516, 1474, 1382, 1357, 1288, 1178, 1096, 966, 862, 805 cm <sup>-1</sup>
1-737	mp224-225 °C III NMR (CDCl <sub>3</sub> )
1.738	mp203·204 °C IH NMR (CDCl <sub>3</sub> ) & 1.76 (s, 3H), 1.82 (s. 3H), 2.46 (s, 6H), 2.45·2.58 (m, 2H), 2.73 (s, 3H), 3.22 (s, 3H), 3.35 (s, 3H), 3.55 (s, 3H), 3.77 (s, 3H), 4.07 (d, J = 6.6 Hz, 2H), 5.18·5.25 (m, 1H), 6.82 (s, 1H), 7.07 (d, J = 8.2 Hz, 1H), 7.32·7.39 (m, 4H) IR(KBr) 3434, 2941, 1519, 1473, 1359, 1276, 1178, 1114, 1085, 967, 860, 811 cm <sup>-1</sup>

Table 146

. 10

	mp158-159 °C
	1H NMR (DMSO-da) $\delta$ 1.72 (8, 3H), 1.76 (8, 3H), 3.72 (8, 6H), 4.54 (d, J = 6.0 Hz, 2H), 5.45-5.52 (m, 1H), 6.55-6.59 (m, 2H),
1.739	6.84-6.90 (m, 5H), 7.57 (d, J = 8.2 Hz, 2H), 8.70 (brs, 1H), 9.53 (brs, 1H)
	IR(KBr) 3465, 2932, 1610, 1523, 1487, 1460, 1283, 1281, 1123, 1010, 819 cm <sup>-1</sup>
	mp180-181 ℃
;	1H NMR (CDCE) 6 2.32 (8, 3H), 3.72 (8, 6H), 5.08 (8, 2H), 6.54-6.58 (m, 1H), 6.68 (8, 1H), 6.85-6.95 (m, 5H), 7.21 (d, J =
1.740	7.6 Hz, 211), 7.39 (d, J = 7.8 Hz, 211), 7.57 (d, J = 8.4 Hz, 211), 8.83 (brs, 1H), 9.54 (brs, 1H)
	IR(KBr) 3519, 2937, 1607, 1562, 1523, 1461, 1400, 1246, 1176, 1125, 1003, 821 cm <sup>-1</sup>
	mp105-106 °C
	1H NMR (CDC13) & 2.13 (s, 6H), 3.17 (s, 3H), 5.16 (s, 2H), 5.85 (brs, 1H), 6.61-6.66 (m, 1H), 6.77 (s, 1H), 7.01 (d, J = 8.2
1.741	Hz, 1H), $7.25-7.46$ (m, 9H), $7.65$ (d, $J = 8.8$ Hz, 2H)
	1R(KBr) 3466, 3031, 2934, 1585, 1513, 1476, 1366, 1285, 1198, 1175, 1148, 1127, 1014, 968, 868, 840 cm <sup>-1</sup>
	mp92-93 °C
	111 NMR (DMSO-d <sub>6</sub> ) $\delta$ 1.74 (e, 311), 1.78 (s. 311), 2.24 (e, 611), 3.31 (e, 3H), 3.65 (e, 3H), 4.56 (d, $J = 6.8$ Hz, 2H), 5.52 (t, $J = 1.0$ (c) $\delta$
1.742	1.742 6.0 Hz, 1H), 6.37 (s, 1H), 6.64-6.76 (m, 2H), 6.88-6.93 (m, 1H), 7.16-7.20 (m, 2H), 8.31 (brs, 1H), 8.45 (brs, 1H), 8.73 (brs,
	1H).
	1R(KBr) 3443, 2932, 1707, 1613, 1516, 1484, 1462, 1387, 1280, 1243, 1196, 1114, 1074, 979 cm <sup>-1</sup>
	mp180·181 ℃
	1H NMR (DMSO-da) 6 2.22 (s, 6H), 2.32 (s, 3H), 3.29 (s, 3H), 3.63 (s, 3H), 5.08 (s, 2H), 6.61-6.65 (m, 1H), 6.75 (s, 1H), 6.93
1.743	(d, J = 8.2 Hz, 1H), 7.13-7.22 (m, 4H), 7.39 (d, J = 7.4 Hz, 2H), 8.30 (brs, 1H), 8.44 (brs, 1H), 8.84 (brs, 1H)
	IR(KBr) 3443, 2930, 1686, 1614, 1587, 1518, 14863, 1462, 1385, 1281, 1246, 1197, 1113, 1073, 1009, 806 cm <sup>-1</sup>

Table 147

1	45	40	35	30	25	20	15	10	5
1H 2H)	mp123-124 ℃ <sup>1</sup> H NMR (ĐMSO-d <sub>6</sub> ) δ 1.65 (s, 3H), 1.71 (s, 3H), 2.23 (s, 6H), 2.36-2.51 (m, 2H), 3.31 (s, 3H), 3.64 (s, 3H), 3. <sup>2</sup> H), 5.22-5.28 (m, 1H), 6.36 (s, 1H), 6.65-6.88 (m, 3H), 7.16 (s, 1H), 8.30 (brs, 1H), 8.44 (brs, 1H), 8.70 (brs, 1H) <sup>2</sup> R(KBr) 3444, 2930, 1686, 1613, 1518, 1483, 1390, 1283, 1248, 1198, 1113, 1074, 1013 cm <sup>-1</sup>	d <sub>6</sub> )	s, 3H), 1.71 (s, 1H), 6.65-6.88 3, 1518, 1483,	3H), 2.23 (s, (m, 3H), 7.10	6H), 2.36-2.6 3 (s, 1H), 8.30 248, 1198, 11	l (m, 2H), 3.3 (brs, 1H), 8.44	11 (s, 3H), 3.64 1 (brs, 111), 8.7	4 ℃ DMSO-da) δ 1.65 (s, 3H), 1.71 (s, 3H), 2.23 (s, 6H), 2.36-2.51 (m, 2H), 3.31 (s, 3H), 3.64 (s, 3H), 3.91-3.98 (m, 5.28 (m, 1H), 6.36 (s, 1H), 6.65-6.88 (m, 3H), 7.16 (s, 1H), 8.30 (brs, 1H), 8.44 (brs, 1H), 8.70 (brs, 1H) 144, 2930, 1686, 1613, 1518, 1483, 1390, 1283, 1248, 1198, 1113, 1074, 1013 cm <sup>-1</sup>	, m
mp 1H (s, ; 7.4E	mp 174-177 °C <sup>1</sup> H NMR (CDCl <sub>3</sub> )	6 1.77-1.78 1), 4.64-4.67 7.55-7.60 (m	(d, J = 0.9 Hz, (d, J = 6.9 Hz, , 2H) 480, 1371, 133	3H), 1.82-1.8 , 2H), 5.51 (n	(3 (d, J = 0.9 I) 1, 111), 6.86 (e)	iz, 3H), 2.74 (6, 1H), 7.09 (d. 1118, 1082, 97	3, 3H), 3.18 (a, 1) = 8.4 Hz, 1	mp 174-177 °C  IH NMR (CDCl <sub>3</sub> ) & 1.77-1.78 (d, J = 0.9 Hz, 3H), 1.82-1.83 (d, J = 0.9 Hz, 3H), 2.74 (s, 3H), 3.18 (s, 3H), 3.25 (s, 3H), 3.57  (s, 3H), 3.78 (s, 2H), 4.64-4.67 (d, J = 6.9 Hz, 2H), 5.51 (m, 1H), 6.86 (s, 1H), 7.09 (d, J = 8.4 Hz, 1H), 7.35-7.40 (m, 2H), 7.45-7.49 (m, 2H), 7.55-7.60 (m, 2H)  (R (CHCl <sub>3</sub> ) 2939, 1613, 1519, 1480, 1371, 1331, 1292, 1251, 1176, 1180, 1118, 1082, 971, 871, 849 cm <sup>-1</sup>	3.57 2H),
mp 1H N (s, 3 (s, 3	mp 134-136 °C <sup>1</sup> H NMR (CDCl <sub>3</sub> )	6 1.69 (s, 3F 1), 4.07-4.11 7.55-7.61 (m,	H), 1.75 (s, 3H), (t, J = 5.7 Hz, 2H)	2.53-2.60 (dt 2H), 5.22 (m	, J = 6.6, 5.7 l , 1H), 6.86 (8	1z, 2H), 2.73 (d, 1H), 7.07 (d, 1119, 10	s, 3H), 3.18 (s, J = 9.0 Hz, 1 83.1004.970.	mp 134-136 °C  14 NMR (CDCl <sub>3</sub> ) & 1.69 (s, 3H), 1.75 (s, 3H), 2.53-2.60 (dt, J = 6.6, 5.7 Hz, 2H), 2.73 (s, 3H), 3.18 (s, 3H), 3.23 (s, 3H), 3.66  (s, 3H), 3.78 (s, 3H), 4.07-4.11 (t, J = 5.7 Hz, 2H), 5.22 (m, 1H), 6.86 (s, 1H), 7.07 (d, J = 9.0 Hz, 1H), 7.35-7.40 (m, 2H), 7.45-7.49 (m, 2H), 7.55-7.61 (m, 2H)  (GRCl <sub>3</sub> ) 2938, 1614, 1519, 1480, 1448, 1371, 1331, 1294, 1228, 1176, 1150, 1119, 1083, 1004, 970, 849, 819 cm <sup>-1</sup>	1.56 (H),
mp 1 H N 7.10	mp 182-183 °C <sup>1</sup> H NMR (CDCl <sub>3</sub> )	δ 2.26 (s, 3F 8 Hz, 2H), 7.5 643, 2924, 28	3 °C: (Br. 3H), 2.28 (s, 3H), 4.74 (s, 1H), 5.16 (s, 2H), 5.69 (s, 1H), 6.81-6.89 (m, 1, J = 4.8 Hz, 2H), 7.23-7.26 (m, 2H), 7.39-7.45 (m, 5H) 3597, 3543, 2924, 2871, 1611, 1587, 1522, 1490, 1465, 1382, 1171, 1126, 1012, 836 cm <sup>-1</sup>	, 4.74 (s, 1H), ), 7.39-7.45 (r 7, 1522, 1490,	, 5.16 (s, 2H), n, 5H) 1455, 1382,	5.69 (s, 1H), 6	.81-6.89 (m, 3 12, 836 cm <sup>-1</sup>	3 °C: (Sp. 2.26 (s, 3H), 2.28 (s, 3H), 4.74 (s, 1H), 5.16 (s, 2H), 5.69 (s, 1H), 6.81-6.89 (m, 3H), 6.96-6.99 (m, 2H), 1.5 = 4.8 Hz, 2H), 7.23-7.26 (m, 2H), 7.39-7.45 (m, 5H) (m, 5H) (m, 2H), 7.3543, 2924, 2871, 1611, 1587, 1522, 1490, 1455, 1382, 1171, 1126, 1012, 836 cm <sup>-1</sup>	H),
np H P '.16	mp 158-161 °C <sup>1</sup> H NMR (CDCl <sub>3</sub> ) ¢  7.16 (d, J = 8.7 Hz,  IR (CHCl <sub>3</sub> ) 2939, 1°	6 2.38 (e, 3F 1H), 7.21-7.5 732, 1614, 16	1 °C :DCl <sub>3</sub> ) δ 2.38 (s, 3H), 2.74 (s, 3H), 3.12 (s, 3H), 3.18 (s, 3H), 3.57 (s, 3H), 3.78 (s, 3H), 5.15 (s, 2H), 8.7 Hz, 1H), 7.21-7.24 (d, J = 7.8 Hz, 1H), 7.35-7.40 (m, 5H), 7.45-7.49 (m, 2H), 7.52-7.62 (m, 2H) 2939, 1732, 1614, 1619, 1480, 1331, 1294, 1253, 1176, 1160, 1119, 1082, 1003, 970, 869, 816 cm <sup>-1</sup>	3.12 (s, 3H), z, 1H), 7.35-7	3.18 (s, 3H), 3.40 (m, 5H), 7.176, 1156,	1.67 (s, 3H), 3. 1.46-7.49 (m, 2.	78 (s, 3H), 5.1 H), 7.52.7.62 (	mp 158·161 °C  H NMR (CDCl <sub>3</sub> )	Н).

Table 148

	The state of the s
	mp 174-176 C
	1H NMR (CDCl <sub>3</sub> ) δ 1.75 (s, 3H), 1.79 (s, 3H), 2.58 (s, 3H), 3.52 (s, 3H), 3.53 (s, 3H), 3.78 (s, 3H), 4.62 (d, J = 6.9 Hz, 2H),
1.749	5.48-5.55 (m, 1H), 6.83 (s, 1H), 6.99 (d, J = 8.7 Hz, 1H), 7.09 (dd, J = 1.8, 8.1 Hz, 1H), 7.11-7.19 (m, 2H), 7.22 (d, J = 1.8 Hz,
	1H), 7.57-7.65 (m, 2H)
	IR (KBr) 2932, 1602, 1519, 1485, 1385, 1368, 1174, 1086, 1015, 986, 848, 804, 527 cm <sup>-1</sup>
	mp 129-131 °C
	111 NMR (CDCL <sub>3</sub> ) & 1.75 (8, 3H), 1.79 (8, 3H), 3.45 (8, 3H), 3.53 (8, 3H), 3.75 (8, 3H), 4.62 (d, J = 6.6 Hz, 2H), 5.24 (8, 2H),
1.750	5.50-5.58 (m, 1H), 5.90 (s, 1H), 6.44 (s, 1H), 6.99 (d, J = 8.7 Hz, 1H), 7.08-7.18 (m, 3H), 7.29 (d, J = 1.8 Hz, 1H), 7.58-7.64 (m,
	2H)
	IR (KBr) 3361, 2953, 2934, 1522, 1488, 1460, 1391, 1230, 1154, 1121, 1071, 993, 912, 817, 587 cm <sup>-1</sup>
	mp 148-150 ℃
	1H NMR (CDCl <sub>3</sub> ) δ 1.68 (s, 3H), 1.74 (s, 3H), 2.51.2.60 (m, 5H), 3.53 (s, 6H), 3.77 (s, 3H), 4.02 (t, J = 7.2 Hz, 2H), 5.19-
1-751	5.25 (m, 3H), 6.83 (s, 1H), 6.98 (d, J = 8.4 Hz, 1H), 7.08 (dd, J = 2.1, 8.4 Hz, 1H), 7.11·7.18 (m, 2H), 7.21(d, J = 2.1 Hz, 1H),
	7.57.7.64 (m, 2H)
	IR (KBr) 2931, 1603, 1519, 1484, 1386, 1370, 1231, 1175, 1086, 1015, 983, 961, 847, 728, 526 cm <sup>-1</sup>
	mp 99-101 ℃
	1H NMR (CDCl <sub>3</sub> ) δ 1.68 (s, 3H), 1.73 (s, 3H), 2.55 (q, J = 7.2 Hz, 2H), 3.44 (s, 3H), 3.54, (s, 3H), 3.75 (s, 3H), 4.04 (t, J = 7.2)
1-752	1-752 Hz, 2H), 5.20-5.25 (m, 3H), 5.89 (s, 1H), 6.44 (s, 1H), 6.98 (d, J=8.1 Hz, 1H), 7.09-7.18 (m, 3H), 7.26-7.27 (m, 1H), 7.58-7.63
	(m, 2H)
	IR (KBr) 3349, 2930, 1609, 1523, 1489, 1231, 1152, 1121, 1072, 994, 912, 813, 588 cm <sup>-1</sup>

Table 149

20 25 30	mp 115-117 °C III NMR (CDCla) & 1.69 (s, 3H), 1.75 (s, 3H), 2.53 (q, J = 6.9 Hz, 2H), 2.62 (s, 3H), 3.53 (s, 3H), 3.77 (s, 3H), 4.06 (t, J = 6.9	$11z_{*}$ 211), $5.18-5.25$ (m, $111$ ), $5.70$ (s, $111$ ), $6.83$ (s, $111$ ), $6.89-6.95$ (m, $21$ ), $7.02$ (d, $J=1.2$ Hz, $111$ ), $7.10-7.18$ (m, $211$ ), $7.57-7.65$ (m, $211$ )	IR (KBr) 3545, 2931, 1604, 1520, 1485, 1370, 1249, 1232, 1175, 1084, 1012, 813, 526 cm <sup>-1</sup>	11 NMR (CDCl <sub>3</sub> ) 8 1.14 (t, J = 6.9 Hz, 3H), 1.29 (t, J = 6.9 Hz, 3H), 2.50 (s, 3H), 3.19 (s, 3H), 3.71 (q, J = 6.9 Hz, 2H), 4.00	(q, J = 6.9  Hz, 2H), 5.18 (s, 2H), 5.68 (s, 1H), 6.83 (s, 1H), 6.91 (dd, J = 1.8, 8.4  Hz, 1H), 7.00 (d, J = 8.4  Hz, 1H), 7.04 (d, J = 1.8  Hz, 1H), 7.32.7 48 (m, 7H), 7.66.7 74 (m, 2H)	IR (CHCh <sub>3</sub> ) 3532, 2976, 1586, 1516, 1468, 1369, 1282, 1174, 1148, 1068, 1016, 967, 907, 871 cm <sup>-1</sup>	14 NMR (CDCl <sub>3</sub> ) 8 1.15 (t, J = 6.9 Hz, 3H), 1.28 (t, J = 6.9 Hz, 3H), 3.59 (q, J = 6.9 Hz, 2H), 3.97 (q, J = 6.9 Hz, 2H), 4.89	(s, 1H), 5.15 (s, 2H), 5.64 (s, 1H), 5.98 (s, 1H), 6.45 (s, 1H), 6.86-6.94 (m, 2H), 6.96-7.04 (m, 2H), 7.12 (d, J = 2.4 Hz, 1H),		IR (CHCh) 3534, 1610, 1621, 1488, 1383, 1169, 1116, 1064, 1018, 832 cm.	"H NMR (CDCl <sub>3</sub> ) 6 1.14 (t, J = 6.9 Hz, 3H), 1.30 (t, J = 6.9 Hz, 3H), 1.76 (s, 3H), 1.81 (s, 3H), 2.69 (s, 3H), 3.20 (s, 3H),	3.23 (s, 3H), 3.72 (q, J = 6.9 Hz, 2H), 4.00 (q, J = 6.9 Hz, 2H), 4.64 (d, J = 6.6 Hz, 2H), 5.49 (m, 1H), 6.84 (s, 1H), 7.08 (d, J =	
10	3H), 3.77 (s, 3H), 4.06 (t, J =	H), 7.10-7.18 (m, 211), 7.57-		I), $3.71$ (q, $J = 6.9$ Hz, $2$ H),	(d, J=8,4 Hz, 1H), 7.04 (d,	cm.1	l), 3.97 (q, J = 6.9 Hz, 2H),	, 2H), 7.12 (d, J = 2.4 Hz, 1	•		3H), 2.69 (s, 3H), 3.20 (s, 3	n, 1H), 6.84 (s, 1H), 7.08 (d,	

Table 150

1.757	1  NMR (CDCE) 0 1.14 (t, J = 6.9 Hz, 311), 1.29 (t, J = 6.9 Hz, 311), 2.31 (t, J = 6.9 Hz, 2H), 4.00 (q, J = 6.9 Hz, 2H), 5.14 (s, 2H), 6.83 (s, 1H), 7.14 (d, J = 8.7 Hz, 1H), 7.18-7.24 (m, 2H), 7.31-
	7.40 (m, 5H), 7.41 (d, $J = 2.1$ Hz, 1H), 7.65-7.72 (m, 2H)
	IR (CHCI3) 1607, 1517, 1467, 1369, 1330, 1268, 1175, 1148, 1116, 1069, 1026, 967, 907, 871 cm <sup>-1</sup>
	amorphous powder
1.758	1.758 Hz, 211), 3.97 (q, J = 6.9 Hz, 2H), 4.61 (d, J = 6.9 Hz, 2H), 4.87 (e, 1H), 5.63 (m, 1H), 5.66 (e, 1H), 5.97 (e, 1H),
	6.86-7.00 (m, 4H), 7.09 (d, J = 1.8 Hz, 1H), 7.50-7.57 (m, 2H)
	IR (CHCh) 3528, 2978, 1611, 1521, 1487, 1412, 1383, 1168, 1115, 1064, 905, 831 cm <sup>-1</sup>
	amorphous powder
	1H NMR (CDCl <sub>3</sub> ) $\delta$ 1.15 (t, J = 6.9 Hz, 3H), 1.27 (t, J = 6.9 Hz, 3H), 2.39 (s, 3H), 3.59 (q, J = 6.9 Hz, 2H), 3.97 (q, J = 6.9 Hz, 2H)
1.759	Hz, 2H), 4.88 (s, 1H), 5.10 (s, 2H), 5.64 (s, 1H), 5.97 (s, 1H), 6.45 (s, 1H), 6.97-7.01 (m, 2H), 7.11 (d, J = 1.5 Hz, 1H), 7.20-
	7.26 (m, 211), 7.32-7.37 (m, 211), 7.50-7.66 (m, 211)
	IR (CHCh <sub>3</sub> ) 3526, 2974, 1612, 1620, 1488, 1412, 1383, 1285, 1246, 1116, 1065, 1027, 870 cm <sup>-1</sup>
	mp 169-171 ℃
	1H NMR (CDCl <sub>3</sub> ) 6 2.71 (s, 3H), 3.01 (s, 3H), 3.10 (s, 3H), 3.21 (s, 3H), 3.36 (s, 3H), 3.56 (s, 3H), 3.77 (s, 3H), 4.83 (s,
1.760	2H),6.84 (s, 11I), 7.05 (d, J = 8.4 Hz, 1H), 7.32 (dd, J = 2.1, 8.4 Hz, 1H), 7.36-7.42 (m, 2H), 7.42 (d, J = 2.1 Hz, 1H), 7.65-7.72
	(m, 2H)
	IR (CHCl <sub>13</sub> ) 1666, 1517, 1479, 1368, 1175, 1148, 1119, 1083, 1014, 968, 871 cm <sup>-1</sup>

Table 151

	mp 175-177 °C
	111 NMR (DMSO-d6) $\delta$ 1.70 (s, 6H), 3.67-3.73 (m, 2H), 3.71 (s, 3H), 3.72 (s, 3H), 4.59 (br , 1H), 5.27-5.31 (m, 1H), 6.50 (d,
197-1	J = 8.1 Hz, 1H), 6.77-6.95 (m, 6H), 7.34-7.40 (m, 2H), 9.23 (br s, 1H), 9.42 (br s, 1H)
	IR (KBr) 3600-2400(br), 1609, 1522, 1492, 1463, 1384, 1263, 1208, 1174, 1129, 1055, 1033 cm
	mp 151-153 C
	111 NMR (CDCh) 5 1.78 (s, 3H), 1.85 (s, 3H), 3.78 (s, 3H), 3.80 (s, 3H), 4.72 (d, J = 6.9 Hz, 2H), 5.39-5.44 (m, 1H), 6.53 (d,
1.762	J = 3.0 Hz, 1H), 6.95 (s, 1H), 7.05 (s, 1H), 7.09-7.16 (m, 3H), 7.38 (d, J = 8.7 Hz, 1H), 7.45 (dd, J = 1.8, 8.7 Hz, 1H), 7.54-7.60
	(m, 2H), 7.80 (d, J = 1.8 Hz, 1H),
	IR (KBr) 3600-2800(br), 1509, 1496, 1481, 1462, 1447, 1383, 1207, 1158, 1051 cm <sup>-1</sup>
	mp 138-139 Ն
	<sup>1</sup> H NMR (CDCl <sub>3</sub> ) δ 3.78 (s, 3H), 3.79 (s, 3H), 6.64 (dd, J = 0.9, 2.7 Hz, 1H), 6.80 (d, J = 7.8 Hz, 1H), 6.94 (s, 1H), 7.04 (s,
1.763	1H), 7.09-7.21 (m, 3H), 7.25-7.27 (m, 1H), 7.32 (d, J = 8.7 Hz, 1H), 7.42 (dd, J = 1.8, 8.4 Hz, 1H), 7.53-7.59 (m, 3H), 8.60-
	8.63 (m, 1H)
	IR (KBr) 3600-2800(br), 1590, 1510, 1497, 1478, 1430, 1384, 1209, 1158, 1053, 1026 cm <sup>-1</sup>
	mp 172-174 C
107	<sup>1</sup> H NMR (CDCl <sub>3</sub> ) $\delta$ 2.32 (8, 3H), 3.78 (8, 3H), 3.79 (8, 3H), 5.30 (8, 2H), 6.59 (d, J = 3.3 Hz, 1H), 6.94 (8, 1H), 7.04 (8, 1H),
₽0/-1	7.04-7.15 (m, 7H), 7.34 (d, J = 8.4 Hz, 1H), 7.41 (dd, J = 1.8, 8.7 Hz, 1H), 7.55-7.59 (m, 2H), 7.82-7.83 (m, 1H)
	IR (KBr) 3600-2800(br), 1516, 1497, 1482, 1466, 1382, 1306, 1219, 1209, 1159, 1051, 1026 cm <sup>-1</sup>
	mp 134-136 °C
1 765	<sup>1</sup> H NMR (DMSO-d <sub>6</sub> ) δ 1.70 (s, 3H), 1.71 (s, 3H), 3.72-3.74 (m, 2H), 3.73 (s, 3H), 3.74 (s, 3H), 5.25 (br s, 1H), 5.50-5.58 (m,
201:1	1H), 6.66-6.72 (m, 1H), 6.78-6.83 (m, 1H), 6.92 (s, 3H), 6.95 (s, 3H), 7.19-7.29 (m, 2H), 7.30-7.39 (m, 2H), 9.45 (br s, 3H),
	IR (KBr) 3600-2800(br), 1624, 1610, 1526, 1494, 1461, 1382, 1255, 1208, 1175, 1120, 1054, 1031 cm-1

Table 152

	mp 166-168 C
-	111 NMR (CDCl3) 8 2.40 (8, 311), 3.77 (8, 611), 4.82 (8, 111), 6.71 (d, J = 2.4 Hz, 1H), 6.86·6.93 (m, 4H), 7.22·7.32 (m, 4H),
99/-	7.43-7.48 (m, 2II), 7.58-7.64 (m, 1H), 7.71-7.75 (m, 2H)
	1R (KBr) 3600-2800(hr), 1611, 1524, 1492, 1382, 1336, 1265, 1209, 1162, 1090, 1053, 1030 cm <sup>-1</sup>
	mp 139-140 ℃
t	<sup>1</sup> H NMR (CDCl <sub>3</sub> ) δ 3.78 (s, 3H), 3.80 (s, 3H), 6.60-6.62 (m, 1H), 6.95 (s, 1H), 7.05 (s, 1H), m), 7.08-7.16 (m, 2H), 7.23-7.26
/a/	(m, 111), 7.45 (d, J = 1.2 Hz, 211), 7.54-7.61 (m, 211), 7.83 (d, J = 0.6 Hz, 111), 8.18 (br s, 1H)
	IR (KBr) 3600-2800(br), 1520, 1497, 1465, 1448, 1414, 1383, 1313, 1218, 1205, 1159, 1048, 1024 cm-1
	1H NMR (CDCl.1) 3 2.26 (s, 3H), 3.48 (s, 3H), 3.75 (s, 3H), 5.16 (s, 2H), 5.69 (s, 1H), 5.89 (s, 1H), 6.45 (s, 1H), 6.94 (d.d, J=
1.768	8.4 & 2.1Hz, 111), 7.02 (d, J = 8.4Hz, 1H), 7.08 (d, J = 2.1Hz, 1H), 7.35 · 7.50 (m, 8H), 8.36 · 8.44 (m, 1H)
	IR (KBr) 3384, 1592, 1525, 1487, 1455, 1397, 1312, 1250, 1122, 1102, 1069, 1011cm <sup>-1</sup>
	1H NMR (CDCl <sub>1</sub> ) δ 2.26 (8, 3H), 2.68 (8, 3H), 3.13 (8, 3H), 3.56 (8, 3H), 3.78 (8, 3H), 5.19 (8, 2H), 6.84 (8, 1H), 7.15 (d, J=
1.769	8.4 Hz, 1H), 7.30 · 7.51 (m, 10H), 8.37 · 8.47 (m, 1H)
	IR (KBr)3384, 1704, 1590, 1524, 1481, 1389, 1357, 1272, 1240, 1174, 1114, 1082,1017cm1
	1H NMR (CDCl3) 6 2.67 (s, 3H), 2.84 (s, 3H), 3.28 (s, 3H), 3.56 (s, 3H), 3.78 (s, 3H), 6.26 (s, 1H), 6.85 (s, 1H), 7.17 (d, J=
1.770	1.770 9.0 Hz, 1H), 7.24 · 7.33 (m, 2H), 7.35 · 7.50 (m, 3H), 8.37 · 8.50 (m, 1H)
	IR (KBr)3383, 1674, 1595, 1526, 1482, 1363, 1177, 1078, 1012cm <sup>-1</sup>
	14 NMR (CDCl <sub>3</sub> ) 8 1.76 (8, 3H), 1.81 (8, 3H), 2.26 (8, 3H), 2.72 (8, 3H), 3.23 (8, 3H), 3.56 (8, 3H), 3.78 (8, 3H), 4.64 (d, J =
1.771	1-771 7.2 Hz, 2H), 5.44 - 5.53 (m, 1H), 6.84 (s, 1H), 7.09 (d, J = 8.4 Hz, 1H), 7.30 - 7.53 (m, 5H), 8.38 - 8.47 (m, 1H)
	IR (KBr) 3376, 1697, 1594, 1524, 1481, 1365, 1270, 1239, 1177, 1112, 1079, 1013cm <sup>-1</sup>

Table 153

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35 40	1H NMR (CDCl3) & 2.26 (s, 3H), 2.38 (s, 3H), 2.68 (s, 3H), 3.12 (s, 3H), 3.56 (s, 3H), 3.78 (s, 3H), 5.14 (s, 2H), 6.84 (s, 1H), 7.12 · 7.50 (m, 9H), 8.35 · 8.44 (m, 1H)  1RRR 1.3365 1693 1692 1596 1477 1374 1314 1991 1180 1165 1111 1078cm-1	<sup>1</sup> H NMR (CDCl <sub>3</sub> ) δ 1.76 (s, 3H), 1.82 (s, 3H), 2.26 (s, 3H), 3.48 (s, 3H), 3.75 (s, 3H), 4.62 (d, J = 6.9 Hz, 2H), 5.46 · 5.58 (m, 1H), 5.71 (s, 1H), 5.86 (s, 1H), 6.44 (s, 1H), 6.87 · 7.00 (m, 2H), 7.05 (d, J = 1.8 Hz, 1H), 7.33 · 7.52 (m, 3H), 8.36 · 8.47 (m, 1H)  (m, 1H)  (R(R)) 1737, 1604, 1519, 1482, 1392, 1366, 1267, 1173, 1131, 1084, 1062, 1009cm <sup>-1</sup>	<sup>1</sup> H NMR (CDCl <sub>3</sub> ) & 2.25 (s, 3H), 2.38 (s, 3H), 3.48 (s, 3H), 3.75 (s, 3H), 5.10 (s, 2H), 5.12 (brs, 1H), 5.90 (s, 1H), 6.44 (s, 1H), 6.94 (.d.d., J = 8.4 & 1.8 Hz, 1H), 7.02 (.d., J = 8.4 Hz, 1H), 7.06 (.d., J = 1.8 Hz, 1H), 7.18 · 7.52 (m, 6H), 8.35 · 8.44 (m, 1H)  1H)  1R (KBr) 1686, 1590, 1524, 1488, 1398, 1314, 1257, 1102, 1068, 1008 cm <sup>-1</sup>	<sup>1</sup> H NMR (CDCl <sub>3</sub> ) & 3.47 (s, 3H), 3.76 (s, 3H), 5.16 (s, 2H), 5.71 (s, 1H), 5.82 (s, 1H), 6.45 (s, 1H), 6.97 (d.d, J = 8.4 & 2.1Hz, 1H), 7.04 (d, J = 8.4Hz, 1H), 7.07 (d, J = 2.1Hz, 1H), 7.22 · 7.30 (m, 1H), 7.33 · 7.49 (m, 5H), 7.92 · 7.98 (m, 1H), 8.09 · 8.14 (m, 1H), 10.44 (s, 1H)  (m, 1H), 10.44 (s, 1H)  IR (KBr) 3492,3459, 1692, 1605, 1518, 1486, 1388, 1294, 1238, 1200, 1115, 1100, 1070,1008cm <sup>-1</sup>	<sup>1</sup> H NMR (CDCl <sub>3</sub> ) δ 2.35 (d, J = 1.8Hz, 3H), 2.68 (s, 3H), 3.13 (s, 3H), 3.23 (s, 3H), 3.78 (s, 3H), 5.19 (s, 2H), 6.82 (s, 1H), 7.04 - 7.17 (m, 2H), 7.30 - 7.49 (m, 9H)  IR (KBr) 1606, 1518, 1478, 1364, 1295, 1271, 1240, 1182, 1118, 1087, 1077, 1017cm <sup>-1</sup>	<sup>1</sup> H NMR (CUCl <sub>3</sub> ) & 1.76 (8, 3H), 1.81 (8, 3H), 2.35 (8, 3H), 2.72 (8, 3H), 3.23 (8, 3H), 6.6 Hz, 2H), 5.45 · 5.53 (m, 1H), 6.82 (8, 1H), 7.03 · 7.14 (m, 2H), 7.32 · 7.47 (m, 4H)
25	iH), 3.12 (s, 3H), 3.0	H), 3.48 (s, 3H), 3.700 (m, 2H), 7.05 (.d	3H), 3.75 (s, 3H), 5 z, 1H), 7.06 (.d, J = 2, 1068, 1008 cm. <sup>1</sup>	H), 5.71 (8, 1H), 5.8 2 - 7.30 (m, 1H), 7.3 , 1238, 1200, 1115,	I), 3.13 (s, 3H), 3.2; 2, 1118, 1087, 1077	1), 2.72 (s, 3H), 3. 4 (m, 2H), 7.32 - 7.4
20	56 (s, 3H), 3.78 (s,	'5 (s, 3H), 4.62 (s, J = 1.8 Hz, 1H), 7	.10 (s, 2H), 5.12 (t	2 (s, 1H), 6.45 (s, 1 33 - 7.49 (m, 5H), 7 1100, 1070,1008cr	3 (s, 3H), 3.78 (s, 3 1017cm <sup>-1</sup>	23 (s, 3H), 3.53 (s, 17 (m, 4H)
10	3H), 5.14 (s, 2H), 6.84	4.62 (d, J = 6.9 Hz, 2H), 5.46 · 5.58 1H), 7.33 · 7.52 (m, 3H), 8.36 · 8.47	7.52 (m, 6H), 8.35 · 8	H), 6.97 (d.d, J = 8.4 & .92 · 7.98 (m, 1H), 8.09 n <sup>-1</sup>	H), 5.19 (s, 2H), 6.82 (	3.23 (a, 3H), 3.53 (s, 3H), 3.78 (a, 3H), 4.64 (d, J = 7.47 (m, 4H)
5	(8, 1H),	6 - 8.47	6.44 (s,	2.1Hz,	, 1H),	(d, J =

Table 154

	11 NMR (CDC)3) $\delta$ 2.35 (d, J = 1.2Hz, 3H), 3.45 (s, 3H), 3.75 (s, 3H), 5.15 (s, 2H), 5.68 (s, 1H), 5.90 (s, 1H), 6.43 (s, 1H),
1.778	6.92 · 7.12 (m, 4H), 7.31 · 7.50 (m, 7H)
	IR (KBr) 3536, 3398, 1609, 1587, 1518, 1487, 1244, 1192, 1110, 1071, 1010cm <sup>-1</sup>
	III NMR (CDCI.) 6 1.76 (9, 3H), 1.82 (9, 3H), 2.35 (9, 3H), 3.45 (9, 3H), 3.74 (9, 3H), 4.61 (d, J = 6.9 Hz, 2H), 5.43 · 5.60 (m,
-	111), 6.43 (s, 111), 6.87 · 7, 15 (m, 411), 7.36 · 7.51 (m, 211)
?/	IR (KBr) 3512,3444, 1611, 1585, 1518, 1488, 1462, 1447, 1416, 1305, 1288, 1243, 1207,
	1112, 1103, 1070, 1012cm <sup>-1</sup>
	111 NMR (CDCE) 6 3.45 (s, 3H), 3.75 (s, 3H), 4.84 (s, 2H), 5.15 (s, 2H), 5.70 (s, 1H), 5.88 (s, 1H), 6.44 (s, 1H), 6.91 · 7.20 (m,
	4H), 7.32 · 7.48 (m, 5H), 7.52 · 7.61 (m, 1H), 7.64 · 7.74 (m, 1H)
087-1	IR (KBr)3523,3428, 1610, 1587, 1516, 1482, 1463, 1400, 1321, 1285, 1238, 1187,
	1106cm <sup>-1</sup>
	1H NMIR (CDCI3) ô 2.68 (8, 3H), 3.13 (8, 3H), 3.54 (8, 3H), 3.78 (6, 3H), 5.19 (8, 2H), 5.44 (d.d. J = 18 & 0.6Hz, 1H), 5.90
100	$(d.d, J = 18 \& 0.9Hz, 1H), 6.84 (s, 1H), 6.86 \cdot 6.98 (m, 1H), 7.09 \cdot 7.18 (m, 2H), 7.31 \cdot 7.52 (m, 8H), 7.71 (d.d, J = 7.2 \& 2.4)$
10)-1	Hz, 1H)
	IR (KBr) 1608, 1518, 1479, 1365, 1235, 1177, 1118, 1079, 1013cm <sup>-1</sup>
	<sup>1</sup> H NMR (CDCl <sub>3</sub> ) $\delta$ 1.59 (d, J = 6.3Hz, 3H), 2.68 (s, 3H), 3.13 (s, 3H), 3.55 (s, 3H), 3.78 (s, 3H), 6.19 (s, 2H), 5.21 · 5.30 (m, 1.4)
1.782	1H), 6.84 (s, 1H), 7.08 - 7.17 (m, 3H), 7.32 - 7.56 (m, 7H), 7.69 - 7.75 (m, 1H)
	IR (KBr) 3543,3433, 1609, 1518, 1480, 1364, 1235, 1178, 1117, 1078, 1014cm <sup>-1</sup>
	<sup>1</sup> H NMR (CDCl <sub>3</sub> ) $\delta$ 1.59 (d, $J = 6.0$ Hz, 3H), 2.01 (brs, 1H), 3.47 (s, 3H), 3.76 (s, 3H), 5.16 (s, 2H), 5.15 $\cdot$ 5.30 (m, 1H), 5.72
I-783	1.783 (s, 1H), 5.91 (s, 1H), 6.46 (s, 1H), 6.89 - 7.16 (m, 4H), 7.30 - 7.60 (m, 6H), 7.68 - 7.85 (m, 1H)
	IR(KBr)3467, 1613, 1586, 1517, 1484, 1455, 1421, 1395, 1287, 1238, 1111,1070, 1010cm <sup>-1</sup>

Table 155

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50	45	40	35	30	25	20	15	10	5
1-784	<sup>1</sup> H NMR (CDCl <sub>3</sub> ) & 1.77 (s, 3H), 1.81 (s, 3H), 3.23 (s, 3H), 3.81 (s, 6H), 4.64 (d, J = 6.6 Hz, 2H), 5.47 · 5.54 (m, 1H), 6.91 (s, 1H), 6.96 (s, 1H), 7.06 (d, J = 8.4 Hz, 1H), 7.49 (d.d, J = 8.4 & 2.1 Hz, 1H), 7.58 (d, J = 2.1 Hz, 1H), 7.60 · 7.74 (m, 4H) IR (KBr) 2228, 1610, 1490, 1348, 1295, 1266, 1209, 1174, 1112, 1056, 1038, 1000cm.	5 1.77 (s, 3H), 1.8 .06 (.d, J = 8.4 Hz, 0, 1490, 1348, 129	1 (s, 3H), 3.2 , 1H), 7.49 (d	3 (s, 3H), 3.81 1.d, J = 8.4 & 1 9, 1174, 1112	(8, 6H), 4.64 (a)	l, J = 6.6 Hz, 2 8 (d, J = 2.1F	H), 5.47 · E	4z, 2H), 5.47 · 5.54 (m, 1H), 6.9 2.1Hz, 1H), 7.60 · 7.74 (m, 4H)	6.91 (s, IH)
1.785	mp169·170 °C <sup>1</sup> H NMR (CDCl <sub>3</sub> )	) 2.07 (s, 6H), 3.2 , 2933, 1698, 1510	.0 (s, 3H), 5.1 5, 1478, 1362	16 (s, 21I), 5.7 2, 1260, 1227,	l (brs, 111), 6.97 1162, 1132, 965	7.45 (m, 14H)	_		
1.786	mp169-170 °C <sup>1</sup> H NMR (CDCl <sub>3</sub> ) δ 2.13 (s, 6H), 3.11 (s, 3H), 3.18 (s, 3H), 5.18 (s, 2H), 7.09-7.47 (m, 12H), 7.64 (d, J = 9.0 Hz, 2H) <sup>1</sup> R(KBr) 3434, 3035, 2938, 1516, 1474, 1362, 1290, 1197, 1182, 1174, 1149, 1114, 973, 867, 842 cm <sup>-1</sup>	2.13 (s, 6H), 3.1 , 2938, 1516, 1474	1 (s, 3H), 3.1 1, 1362, 1290	(8 (s, 3H), 5.18 ), 1197, 1182,	3 (s, 2H), 7.09-7	.47 (m, 12H), 7 14, 973, 867, 84	7.64 (d, J =	- 9.0 Hz, 2H)	
1.787	mp156-157 ℃ <sup>1</sup> H NMR (CDCl <sub>3</sub> ) δ 2.08 (s, 6H), 3.12 (s, 3H), 3.21 (s, 3H), 5.18 (s, 2H), 7.12-7.58 (m, 14H) <sup>1</sup> R(KB <sub>Γ</sub> ) 3494, 3292, 3033, 2934, 1753, 1712, 1517, 1478, 1368, 1294, 1261, 1173, 1151, 967, 870 cm <sup>-1</sup>	2.08 (s, 6H), 3.1:	2 (s, 3H), 3.2 3, 1712, 1517	11 (s, 3H), 5.1£	(s, 2H), 7.12-7 1294, 1261, 117	.58 (m, 14H)	370 cm <sup>-1</sup>		
1.788	mp105-106 °C <sup>1</sup> H NMR (CDCl <sub>3</sub> )	1.75 (s, 3H), 1.8t ), 7.16-7.38 (m, 6F	5 (s, 3H), 2.1; 1), 7.64 (d, J 1285, 1152,	2 (s, 6H), 3.18 = 8.8 Hz, 2H) 1113, 971, 91	(s, 3H), 3.22 (s. 6, 861, 845 cm	, 3H), 4.64 (d, c	J = 7.0 Hz,	2H), 6.62 (t,	J = 6.8
-789	mp148-149 °C <sup>1</sup> H NMR (CDCl <sub>3</sub> )	2.12 (e, 6H), 2.36 2931, 1678, 1516	9 (s, 3H), 3.10 1, 147 <u>6, 1362,</u>	0 (s, 3H), 3.18	(s, 3H), 5.13 (s,	2H), 7.10-7.36	3 (m, 11H),	, 7.64 (d, J = 8	3.6 Hz,

Table 156

	mp139-140 ℃
;	111 NMR (CDCl3) 6 1.76 (s, 3H), 1.82 (s, 3H), 2.14 (e, 6H), 2.46-2.58 (m, 2H), 3.14 (e, 3H), 3.19 (s, 3H), 4.07 (d, J = 7.0 Hz,
062-1	211), 6.16-5.23 (m, 111), 7.05 (s, 111), 7.14-7.41 (m, 611), 7.66 (d, J = 8.4 Hz, 2H)
	IR(KBr) 3433, 2946, 1514, 1467, 1360, 1282, 1180, 1152, 1115, 868 cm <sup>-1</sup>
	mp125-124 C
	111 NMR (DMSO-d6) $\delta$ 1.72 (8, 311), 1.77 (8, 311), 2.03 (8, 6H), 4.56 (d, J = 6.6 Hz, 2H), 5.50 (t, J = 6.0 Hz, 1H), 6.49 (d, J = 6.4 Hz, 2H)
1.791	9.6 Hz, 111), 6.65 (s, 111), 6.83 (d, J = 8.4 Hz, 211), 6.98 (d, J = 8.1 Hz, 111), 7.27 (s, 2H), 7.48 (d, J = 6.6 Hz, 2H), 8.92 (brs,
	1H), 9.48 (brs, 1H)
	IR(KBr) 3337, 2930, 1612, 1518, 1471, 1285, 1258, 1207, 1123, 999, 834 cm <sup>-1</sup>
	mp230-231 C
	1H NMR (DMSO-d6) 6 2.04 (8, 6H), 2.33 (8, 3H), 5.09 (8, 2H), 6.50 (d, J = 8.4 Hz, 1H), 6.59 (8, 1H), 6.85 (d, J = 8.1 Hz, 2H),
1.792	7.04 (d, J = 5.4 Hz, 1H), 7.23 (d, J = 7.5 Hz, 2H), 7.29 (s, 1H), 7.41 (d, J = 7.8 Hz, 2H), 7.49 (d, J = 8.7 Hz, 2H), 9.05 (brs,
	1H), 9.50 (brs, 1H)
	IR(KBr) 3287, 1609, 1519, 1475, 1298, 1245, 1126, 1006, 841 cm <sup>-1</sup>
	mp118-119 C
	1H NMR (DMSO-d <sub>6</sub> ) δ 1.64 (s, 3H), 1.70 (s, 3H), 2.03 (s, 6H), 2.42-2.50 (m, 2H), 3.96 (t, J = 6.9 Hz, 2H), 5.27 (t, J = 7.2 Hz,
1.793	2H), 6.49 (d, J = 8.1 Hz, 1H), 6.55 (s, 1H), 6.84 (d, J = 8.4 Hz, 2H), 6.96 (d, J = 8.1 Hz, 1H), 7.27 (s, 2H), 7.48 (d, J = 8.7 Hz,
	2H), 8.89 (brs, 1H), 9.48 (brs, 1H)
	IR(KBr) 3392, 2928, 1610, 1519, 1466, 1250, 1230, 1205, 1178, 1128, 1031, 834, 808 cm <sup>-1</sup>
	mp139.140 C
	1H NMR (DMSO-d6) 6 1.75 (s, 3H), 1.77 (s, 3H), 2.50 (s, 6H), 3.39 (s, 3H), 3.44 (s, 3H), 4.69 (d, J = 6.2 Hz, 2H), 5.50 (t, J =
1-794	6.6 Hz, 1H), 7.29-7.33 (m, 3H), 7.41-7.47 (m, 4H), 7.59-7.68 (m, 2H)
	IR(KBr) 3433, 2933, 1675, 1516, 1473, 1366, 1358, 1292, 1259, 1182, 1172, 1151, 969, 873 cm <sup>-1</sup>

Table 157

	mp151-152 ℃
1.795	1H NMR (DMSO-ds) ô 2.05 (s, 611), 2.18 (s, 311), 3.36 (s, 3h), 3.44 (s, 3H), 5.22 (s, 2H), 7.08-7.63 (m, 13H)
	IR(KBr) 3434, 3023, 2928, 1517, 1477, 1368, 1293, 1261, 1183, 1152, 966, 870 cm <sup>-1</sup>
	າກp 159·160 ℃
1 706	111 NMR (DMSO-d <sub>6</sub> ) 5 · 1.65 (s, 3H), 1.70 (s, 3H), 2.05 (s, 6H), 2.48·2.53 (m, 2H), 3.38 (s, 3H), 3.44 (s, 3H), 4.10 (t, J = 7.4
067-1	Hz, 211), 5.21-5.27 (m, 111), 7.28-7.34 (m, 311), 7.41-7.47 (m, 411), 7.59-7.64 (m, 2H)
	IR(KBr) 3434, 2938, 1519, 1478, 1439, 1362, 1295, 1269, 1173, 1152, 1125, 960, 870, 839 cm <sup>-1</sup>
	mp130-131 ℃
707	<sup>1</sup> H NMR (DMSO-d <sub>6</sub> ) δ 1.72 (9, 3H), 1.75 (8, 3H), 2.02 (8, 6H), 4.59 (4, J = 6.4 Hz, 2H), 5.48 (t, J = 7.2 Hz, 1H), 6.81-7.07
161-1	(m, 7H), 7.25 (s, 2H), 8.96 (brs, 1H), 9.41 (brs, 1H)
	IR(KBr) 3392, 1608, 1589, 1518, 1475, 1322, 1258, 1170, 1127, 974, 836, 808 cm.
	mp143.144 C
1.798	1H NMR (DMSO-dc) δ 2.03 (s, 6H), 2.32 (s, 3H), 5.12 (s, 2H), 6.82-7.41 (m, 13H), 9.10 (brs, 1H), 9.41 (brs, 1H)
	IR(KBr) 3344, 1609, 1521, 1427, 1255, 1236, 1205, 1129, 998, 832, 806, 792 cm <sup>-1</sup>
	mp163·164 ℃
1 700	<sup>1</sup> H NMR (DMSO-de) δ 1.87 (s, 3H), 1.90 (s, 3H), 3.42 (s, 3H), 5.15 (s, 2H), 6.88-7.03 (m, 4H), 7.24-7.58 (m, 9H), 7.97 (brs,
667-1	1H), 9.02 (brs, 1H)
	IR(KBr) 3563, 3476, 3001, 2922, 1698, 1527, 1512, 1476, 1359, 1303, 1261, 1237, 1210, 1195, 1167, 1146, 871 cm <sup>-1</sup>
	<sup>1</sup> H NMR (CDCl <sub>3</sub> ) δ 1.30 (d, J = 6.6Hz, 6H), 2.58 (s, 3H), 2.97 (quintet, J = 6.6Hz, 1H), 3.54 (s, 3H), 3.77 (s, 3H), 5.17 (s,
008-1	2H), 6.87 (s, 1H), 7.11 (d, J = 9.0 Hz, 1H), 7.22 - 7.35 (m, 8H), 7.47 - 7.68 (m, 6H), 8.19 - 8.25 (m, 2H)
	IR (KBr) 1737, 1604, 1519, 1482, 1392, 1366, 1267, 1173, 1131, 1084, 1062, 1009cm <sup>-1</sup>

Table 158

	111 NMR (CDCl3) 6 2.56 (s, 3H), 3.55 (s, 3H), 3.78 (s, 3H), 5.17 (s, 2H), 5.69 (s, 1H), 6.84 (s, 1H), 6.91 (d.d, J = 8.4 & 1.8
1.801	1.801 Hz, 111), 7.02 (d, J = 8.4 Hz, 1H), 7.04 (d, J = 1.8Hz, 1H), 7.04 · 7.14 (m, 1H), 7.33 · 7.47 (m, 8H)
	IR(KBr)3446, 1613, 1585, 1522, 1477, 1396, 1357, 1291, 1243, 1204, 1174, 1076,1017, 1006cm <sup>-1</sup>
	foam
	1H NMR (CDCl <sub>3</sub> ) δ 2.82 (s, 3H), 3.22 (s, 3H), 3.25 (s, 3H), 3.26 (s, 3H), 3.55 (s, 3H), 3.78 (s, 3H), 5.48 (s, 2H), 6.86 (s, 1H),
1.802	7.27 (d, J = 8.4 Hz, 1H), 7.39 (d, J = 8.7 Hz, 2H), 7.40 (dd, J = 8.4, 2.1 Hz, 1H), 7.43 (d, J = 2.1 Hz, 1H), 7.67 (d, J = 8.7 Hz,
	IR (Nujol) 1608, 1519, 1480, 1462, 1365, 1176, 1151, 1079, 970, 876, 798 cm <sup>-1</sup>
	foam
	1H NMR (CD3OD) 6 3.28 (s, 3H), 3.68 (s, 3H), 5.17 (s, 2H), 6.43 (s, 1H), 6.81 (dd, J = 8.4, 2.1 Hz, 1H), 6.85 (d, J = 8.7 Hz,
1.803	2H), $6.89$ (d, $J = 2.1$ Hz, 1H), $7.03$ (d, $J = 8.4$ Hz, 1H), $7.46$ (d, $J = 8.7$ Hz, 2H)
	IR (Nujol) 3342, 1611, 1592, 1523, 1488, 1460, 1251, 1225, 1114, 1072, 1012, 941, 826, 756 cm <sup>-1</sup>
	mp 150-162°C
,	1H NMR (DMSO-d6) 5 3.31 (s, 3H), 3.64 (s, 3H), 5.00 (s, 2H), 6.39 (s, 1H), 6.66 (dd, J = 8.4, 2.1 Hz, 1H), 6.79 (d, J = 2.1
1.804	Hz, 1H), 6.84 (d, $J = 8.7$ Hz, 2H), 6.98 (d, $J = 8.4$ Hz, 1H), 7.44 (d, $J = 8.7$ Hz, 2H)
	IR (Nujol) 3459, 3291, 1612, 1694, 1522, 1489, 1468, 1267, 1226, 1101, 1073, 1011, 960, 823 cm <sup>-1</sup>
	mp 190-192°C
	1H NMR (DMSO.d6) 6 2.88 (8, 3H), 3.41 (8, 3H), 3.45 (8, 3H), 3.52 (8, 3H), 3.79 (8, 3H), 5.43 (8, 2H), 7.08 (8, 1H), 7.16 (8,
1.805	1H), $7.32 \sim 7.36$ (m, 2H), $7.46$ (d, $J = 8.4$ Hz, 1H), $7.49$ (d, $J = 8.7$ Hz, 2H), $7.53 \sim 7.64$ (m, 3H), $7.74$ (d, $J = 8.7$ Hz, 2H), $7.88$
	$\sim$ 7.91 (m, 2H).
	IR (Nujol) 1604, 1519, 1481, 1462, 1367, 1175, 1081, 1009, 878, 841, 816, 801 cm <sup>-1</sup>

Table 159

	<b>45</b>	. 40	35	30	25	20	15	10	5
1-806	foam  'H NMR (C)  6.98 (dd, J =  7.78~7.82 (	6 3.45 (s, 3H), 1.1 Hz, 1H),7.09	, 3.74 (s, 3H), { (d, J = 8.4 Hz, 1, 1489, 1455, 1	5.31 (s, 211), G. 111), 7.11 (d, 111)	94 (s, 1H), 6.4 , J = 2.1 Hz, 1 15, 1073, 1013	15 (s, 1H), 6.64 H), 7.46~7.50	(s, 1H), 6.93 (m, 3H), 7.53	DCl <sub>3</sub> ) δ 3.45 (s, 3H), 3.74 (s, 3H), 5.31 (s, 2H), 6.94 (s, 1H), 6.45 (s, 1H), 6.64 (s, 1H), 6.93 (d, J = 8.7 Hz, 2H), 8.4, 2.1 Hz, 1H), 7.09 (d, J = 8.4 Hz, 1H), 7.11 (d, J = 2.1 Hz, 1H), 7.46~7.50 (m, 3H), 7.53 (d, J = 8.7 Hz, 2H), m, 2H)  m, 2H) 367, 1612, 1592, 1623, 1489, 1455, 1253, 1226, 1115, 1073, 1013, 942, 816, 767 cm <sup>-1</sup>	H H
1-807	foam 11 NMR (C) 8.4 Hz, 1H), 1H)	0Св.)	. 3.21 (в. 3H), 3 H), 7.38 (dd, Ј , 1365, 1177, 1	1.30 (s, 311), 3.5 = 8.4, 2.1 Hz, 151, 1079, 971	iti (s. 311), 3.71 111), 7.46 (d. 3	8 (8, 311), 5.38 ( ] = 2.1 Hz, 1H),	a, 211), 6.84 (e 7.67 (d, J = 8	7(31) 3 2.76 (8, 311), 3.21 (8, 311), 3.30 (8, 311), 3.56 (8, 311), 3.78 (8, 311), 5.38 (8, 211), 6.84 (6, 111), 7.21 (d, J = 7.38 (d, J = 8.7 Hz, 211), 7.38 (dd, J = 8.4, 2.1 Hz, 111), 7.45 (d, J = 2.1 Hz, 111), 7.67 (d, J = 8.7 Hz, 211), 8.80 (8, 1519, 1480, 1463, 1365, 1177, 1151, 1079, 971, 876, 798 cm <sup>-1</sup>	J = (8,
1-808	mp 193-1957 "H NMR (CI) 7.21 (d, J = 8 2H) IR (Nujol) 16	UCl <sub>3</sub> ) & 2.64 (s, 3H), 2.74 (s, 3H), 3.21 (s, 3H), 3.30 (s, 3H), 3.56 (s, 3H), 3.78 (s, 3H), 3.4 Hz, 1H), 7.38 (d, J = 8.7 Hz, 2H), 7.38 (dd, J = 8.4, 2.1 Hz, 1H), 7.44 (d, J = 2.1 Hz, 1H), 7.44 (d, J = 2.1 Hz, 1H), 7.45 (df, J = 2.1 Hz, 2H), 7.45 (df, J = 2.1 Hz	2.74 (s, 3H), 3 = 8.7 Hz, 2H), , 1463, 1359, 1	.21 (s, 3H), 3.3 , 7.38 (dd, J = 1	10 (s, 3H), 3.5i 8.4, 2.1 Hz, 1l 9, 1012, 946,	6 (s, 3H), 3.78 (H), 7.44 (d, J = 877, 834, 796 c	(s, 3H), 5.28 (t 2.1 Hz, 1H), "	Cl <sub>3</sub> ) δ 2.64 (s, 3H), 2.74 (s, 3H), 3.21 (s, 3H), 3.30 (s, 3H), 3.56 (s, 3H), 3.78 (s, 3H), 5.28 (s, 2H), 6.84 (s, 1H), 4.4 Hz, 1H), 7.38 (d, J = 8.7 Hz, 2.1 Hz, 1H), 7.44 (d, J = 2.1 Hz, 1H), 7.68 (d, J = 8.7 Hz, 1Gz, 1691, 1522, 1480, 1463, 1359, 1174, 1152, 1079, 1012, 946, 877, 834, 796 cm. <sup>1</sup>	H),
1.809	foam  1H NMR (CI 3.78 (s, 3H), (d, J = 2.1 H; IR (KBr) 343	6 1.42 (t, J = 7, 2H), 6.84 (e, 1) 7.68 (d, J = 8.7	7.5 Hz, 3H), 2. 1H), 7.21 (d, 4. 7 Hz, 211) 1481, 1365, 11'	73 (s, 3H), 2.94 J = 8.4 Hz, 1H) 77, 1151, 1080	6 (q, J = 7.5 l ), 7.38 (d, J = , 970, 876, 79	Hz, 2H), 3.21 (6 8.7 Hz, 2H), 7.3	, 3H), 3.31 (e 38 (dd, J = 8.4	OCl <sub>3</sub> ) & 1.42 (t, J = 7.5 Hz, 3H), 2.73 (s, 3H), 2.96 (q, J = 7.5 Hz, 2H), 3.21 (s, 3H), 3.31 (s, 3H), 3.56 (s, 3H), 5.28 (s, 2H), 6.84 (s, 1H), 7.21 (d, J = 8.4 Hz, 1H), 7.38 (d, J = 8.7 Hz, 2H), 7.38 (dd, J = 8.4, 2.1 Hz, 1H), 7.44 (g, 1H), 7.68 (d, J = 8.7 Hz, 2H), 7.68 (d, J = 8.7 Hz, 2H) (d, J = 8.7 Hz, 2H)	£),

Table 160

1-810	foaim III NMR (CDCI <sub>3</sub> ) & 2.71 (s, 311), 3.21 (s, 311), 3.35 (s, 311), 3.56 (s, 311), 3.78 (s, 311), 5.38 (s, 211), 6.84 (s, 111), 7.25 (d, J = 8.4 IIz, 111), 7.40 (dd, J = 8.4, 2.1 Hz, 111), 7.46 (d, J = 2.1 Hz, 111), 7.54~7.64 (m, 3H), 7.68 (d, J = 8.7 IIz, 211), 8.12~8.16 (m, 211)  8.7 IIz, 211), 8.12~8.16 (m, 211)  IR (KBr) 3433, 1609, 1561, 1519, 1480, 1365, 1177, 1151, 1081, 971, 876, 798 cm <sup>-1</sup>
1.811	
1.812	
1.813	foam 1H NMR (DMSO-d <sub>6</sub> ) ô 2.47 (s, 6H), 2.55 (s, 3H), 3.30 (s, 3H), 3.64 (s, 3H), 5.16 (s, 2H), 6.39 (s, 1H), 6.66 (dd, J = 8.4, 2.1  Hz, 1H), 6.76 (d, J = 2.1 Hz, 1H), 6.84 (d, J = 8.7 Hz, 2H), 7.03 (d, J = 8.4 Hz, 1H), 7.44 (d, J = 8.7 Hz, 2H),  IR (KBr) 3399, 3165, 1611, 1521, 1488, 1406, 1362, 1213, 1114, 1069, 1014, 818, 759 cm <sup>-1</sup>

Table 161

20 25 30	1°C  OMSO-da) δ 2.66 (s, 3H), 3.30 (s, 3H), 3.64 (s, 3H), 5.26 (s, 2H), 6.39 (s, 1H), 6.66 (dd, J = 8.4, 2.1 Hz, 1H), 6.77  In, 1H), 6.84 (d, J = 8.7 Hz, 2H), 7.02 (d, J = 8.4 Hz, 1H), 7.44 (d, J = 8.7 Hz, 2H), 8.48 (d, J = 2.7 Hz, 1H), 8.53 (d, 1H)  OMSO-da) 3491 3570 1610 1581 1593 1488 1469 1408 1975 1996 1111 1065 1040 991 795 2001	mp 288-290°C (decomp.) HI NMR (DMSO-da) 5 2.89 (a, 3H), 3.41 (a, 3H), 3.45 (a, 3H), 3.52 (a, 3H), 3.79 (a, 3H), 4.95 (a, 2H), 5.65 (a, 1H), 7.08 (a, 1H), 7.26 (d, J = 8.4 Hz, 1H), 7.33 (dd, J = 8.4, 2.1 Hz, 1H), 7.38 (d, J = 2.1 Hz, 1H), 7.49 (d, J = 8.7 Hz, 2H), 7.74 (d, J = 8.7 Hz, 2H), 7.74 (d, J = 8.7 Hz, 2H), 1.74 (d, J = 8	mp 204-206°C  14 NMR (DMSO-dc)	DCl3) 6 2.20 (s, 3H), 3.45 (s, 3H), 3.75 (s, 3H), 5.15 (s, 2H), 6.45 (s, 1H), 6.92 (d, J = 8.7 Hz, 2H), 6.94 (dd, J = 1H), 6.98 (d, J = 8.4 Hz, 1H), 7.09 (d, J = 1.8 Hz, 1H), 7.18 (m, 1H), 7.37 (t, J = 7.2 Hz, 1H), 7.53 (d, J = 8.7 Hz, 9.1)
35	i6 (s, 3H), 3.30 (s, J = 8.7 Hz, 2H), 7	(9 (e, 3H), 3.41 (s), 7.33 (dd, J = 8.4), 1604, 1516, 148	7 (s, 3H), 3.45 (s, J = 8.4 Hz, 1H), 3 (d, J = 5.1 Hz, 146)	, 3H), 3.45 (s, 3H 8.4 Hz, 1H), 7.09
40	C MSO-da) & 2.6i z, 1H), 6.84 (d, J HI)	C (decomp.) MSO.da, δ 2.8i J = 8.4 Hz, 1H) 120, 1712, 1671,	CMSO-de) 6 2.87 (z, 111), 7.33 (d, 1.7 Hz, 2H), 8.88 (08, 1586, 1557,	UCl <sub>3</sub> ) & 2.20 (s, 1H), 6.98 (d, J = 9H)
45	mp 240-241°C  III NMR (DMSG  (d, J = 2.1 Hz, 1  J = 2.7 Hz, 1H)  HR (Nniol) 3513	mp 288-290°C (decomp.) 111 NMR (DMSO-da) \(\delta\) 111), 7.26 (d, J = 8.4 Hz, 1 112, 211), 118 (Nujol) 3120, 1712, 16	mp 204-206°C H NMR (DMSC J = 8.4, 2.1 Hz, 17.74 (d, J = 8.7 H IR (Nujol) 1608,	foam 1H NMR (CDCl <sub>11</sub> 1.8, 8.4 Hz, 1H),
50	1-814	1.816 1	1 1 1 1 1 1 1	11 118-

Table 162

. . ..

	201:60 C
	11 NMR (CDCl3) & 1.53 (s, 911), 2.67 (s, 311), 3.11 (s, 311), 3.21 (s, 311), 3.56 (s, 311), 3.77 (s, 311), 5.12 (s, 2H), 6.52 (s, 1H),
1.818	6.84 (s, 111), 7.13 (d, J = 8.4 Hz, 111), 7.33 (dd, J = 2.1, 8.4 Hz, 111), 7.38 (d, J = 8.7 Hz, 2H), 7.39 (m, 5H), 7.74 (d, J = 8.7 Hz,
	211)
	IR (KBr) 1692, 1614, 1520, 1480, 1390, 1367, 1231, 1175, 1162, 1078, 876, 799 cm <sup>-1</sup>
	m.p 172 °C
	11 NMR (CDCI3) \$\delta 2.77 (8, 3H), 3.05 (8, 3H), 3.16 (8, 3H), 3.22 (8, 3H), 3.36 (6, 3H), 3.78 (8, 3H), 5.16 (8, 2H), 6.46 (8, 1H),
1.819	6.85 (s, 111), 7.14 (d, J = 8.4 Hz, 1H), 7.25 (d, J = 8.7 Hz, 2H), 7.35 (dd, J = 2.1, 8.4 Hz, 1H), 7.39 (d, J = 8.7 Hz, 2H), 7.40 (d,
	J = 2.1, 1H), 7.47 (d, $J = 8.4$ Hz, 2H), 7.67 (d, $J = 8.7$ Hz, 2H)
	IR (KBr) 1608, 1519, 1480, 1361, 1175, 1154, 1079, 972, 876, 801 cm <sup>-1</sup>
	mp 180-182 ℃
	1H NMR (CDCl <sub>3</sub> ) & 2.69 (s, 3H), 3.14 (s, 3H), 3.21 (s, 3H), 3.53 (s, 3H), 3.71 (d, J = 0.9 Hz, 3H), 5.20 (s, 2H), 6.93 (d, J = 8.4
1-820	Hz, 1H), 7.34-7.49 (m, 9H), 7.59 (dd, J = 9.0, 1.2 Hz, 2H)
	IR (KBr) 1518, 1469, 1357, 1179, 1151, 1038, 871, 821 cm.
	mp 183-185 ℃
	1H NMR (CDCI3) & 3.41 (8, 3H), 3.66 (d, J = 0.9 Hz, 3H), 4.91 (8, 1H), 5.17 (8, 2H), 5.62 (8, 1H), 5.70 (8, 1H), 6.92-6.96 (m,
1-821	211), 6.97 (dd, J = 8.4, 2.0 Hz, 1H), 7.04 (d, J = 8.4 Hz, 1H), 7.10 (d, J = 2.0 Hz, 1H), 7.36-7.48 (m, 7H)
	IR (KBr) 3541, 3398, 1588, 1523, 1461, 1410, 1320, 1261, 1217, 1037, 836, 747 cm <sup>-1</sup>
	mp 108-110 °C
	11 NMR (CDCI <sub>3</sub> ) & 2.69 (8, 3H), 3.13 (8, 3H), 3.46 (8, 3H), 3.53 (8, 3H), 3.77 (8, 3H), 4.66 (8, 2H), 4.76 (8, 2H), 5.19 (8, 2H),
1.822	6.86 (s, 1H), 7.71 (d, J = 8.4 Hz, 1H), 7.33.7.48 (m, 9H), 7.62 (d, J = 8.4 Hz, 2H)
	IR (KBr) 1482, 1390, 1307, 1276, 1177, 1083, 1053, 1013, 807 cm <sup>-1</sup>

Table 163

	II. 109.104 "F.
1-82:3	1H), 7.15 (d, J = 8.4 Hz, 1H), 7.35 (dd, J = 8.4, 2.3 Hz, 1H), 7.37-7.49 (m, 8H), 7.63 (d, J = 7.8 Hz, 2H)
	IR (KBr) 3554, 3434, 1522, 1481, 1389, 1364, 1277, 1234, 1174, 1085, 1012, 807 cm <sup>-1</sup>
	mp 135-137 C ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '
	111 NMR (CDCL3) & 3.19 (s, 3H), 3.60 (s, 3H), 3.71 (s, 3H), 4.96 (s, 1H), 5.18 (s, 2H), 5.78 (s, 1H), 6.73 (s, 1H), 6.88 (dd, J =
1.824	8.3, 2.1 Hz, 1H), 7.02 (d, J = 2.1 Hz, 1H), 7.08 (d, J = 8.3 Hz, 1H), 7.34 (d, J = 8.6 Hz, 2H), 7.41.7.47 (m, 5H), 7.63 (d, J = 8.6
	112, 211)
	IR (KBr) 3479, 1473, 1347, 1149, 1010, 869, 803, 784, 747 cm <sup>-1</sup>
	mp 149-151 C
100	111 NMR (CDCL <sub>3</sub> ) $\delta$ 2.68 (s, 3H), 3.13 (s, 3H), 3.20 (s, 3H), 3.69 (s, 3H), 3.71 (s, 3H), 5.20 (s, 2H), 7.18 (d, J = 8.7 Hz, 1H),
028-1	7.21 (s, 1H), 7.35-7.50 (m, 9H), 7.63 (d, J = 8.1 Hz, 2H)
	IR (KBr) 1519,1469, 1353, 1173, 1149, 1050, 966, 873, 849, 810 cm <sup>-1</sup>
	mp 82.85 °C
	<sup>1</sup> H NMR (CDCL) 6 1.78 (s, 3H), 1.82 (s, 3H), 2.70 (s, 3H), 3.20 (s, 3H), 3.25 (s, 3H), 3.69 (s, 3H), 3.70 (s, 3H), 4.65 (d, J =
1-826	6.9 Hz, 2H), 5.51 (t, J = 6.9 Hz, 1H), 7.11 (d, J = 8.8 Hz, 1H), 7.21 (e, 1H), 7.37 (d, J = 8.9 Hz, 2H), 7.38 (dd, J = 8.8, 2.2 Hz,
	1H), $7.42$ (d, $J = 2.2$ Hz, 1H), $7.63$ (d, $J = 8.9$ Hz, 2H)
	IR (KBr) 1516, 1468, 1363, 1180, 1151, 1045, 967, 846, 788 cm <sup>-1</sup>
	amorphous <sup>1</sup> H NMR (CDCl <sub>3</sub> ) Ø 1.77 (8, 3H), 1.83 (8, 3H), 3.58 (8, 3H), 3.70 (8, 3H), 4.64 (d, J = 6.7 Hz, 2H), 4.97 (8, 1H), 5.04 (8, 1H),
1-827	5.53 (t, J = 6.7 Hz, 1H), 5.81 (s, 1H), 6.73 (s, 1H), 6.87 (dd, J = 8.1, 2.0 Hz, 1H), 6.88 (d, J = 8.7 Hz, 2H), 6.99 (d, J = 2.0 Hz,
	IR (CHCl <sub>3</sub> ) 3595, 3536, 1613, 1584, 1521, 1474, 1406, 1356, 1266, 1094, 1062, 1014, 973, 835 cm <sup>-1</sup>

Table 164

1-828	mp 161-162 °C III NMR (CDCl <sub>3</sub> )
1.829	mp 85-87 °C 111 NMR (CDC13) & 1.69 (a, 311), 1.75 (a, 311), 2.57 (q, J = 6.9 Hz, 211), 2.70 (a, 311), 3.20 (a, 311), 3.24 (a, 314), 3.69 (a, 314), 3.69 (a, 311), 4.09 (t, J = 6.9 Hz, 214), 5.22 (t, J = 6.9 Hz, 111), 7.10 (d, J = 8.4 Hz, 114), 7.21 (a, 114), 7.37-7.44 (m, 911), 7.63 (d, J = 8.4 Hz, 211)  J = 8.4 Hz, 211)  IR (KBr) 1519, 1468, 1362, 1179, 1150, 1046, 967, 865, 847 cm <sup>-1</sup>
1-830	mp 160-162 °C <sup>1</sup> H NMR (CDCl <sub>3</sub> ) δ 2.38 (s, 3H), 2.68 (s, 3H), 3.12 (s, 3H), 3.20 (s, 3H), 3.69 (s, 3H), 3.70 (s, 3H), 5.15 (s, 2H), 7.16-7.25 (m, 4H), 7.34-7.44 (m, 6H), 7.63 (d, J = 8.1 Hz, 2H). 1 (KBr), 1519, 1469, 1365, 1173, 1149, 1049, 965, 873, 849, 808 cm <sup>-1</sup>
1.831	amorphous  11 NMR (CDCl <sub>3</sub> ) & 1.69 (s, 3H), 1.76 (s, 3H), 2.55 (q, J = 6.9 Hz, 1H), 3.58 (s, 3H), 3.69 (s, 3H), 4.08 (t, J = 6.9 Hz, 2H),  4.98 (s, 1H), 5.18 (s, 1H), 5.23 (t, J = 6.9 Hz, 1H), 5.80 (s, 1H), 6.72 (s, 1H), 6.86-6.89 (m, 3H), 6.97-7.00 (m, 3H), 7.47 (d, J = 8.4 Hz, 2H)  = 8.4 Hz, 2H)  IR (KBr) 3595, 3538, 1521, 1471, 1265, 1173, 1095, 1063, 1015, 835 cm <sup>-1</sup>
1.832	mp 200-201 °C <sup>1</sup> H NMR (CDCl <sub>3</sub> ) δ 2.40 (s, 3H), 3.58 (s, 3H), 3.70 (s, 3H), 4.80 (s, 1H), 4.92 (s, 1H), 5.13 (s, 2H), 5.77 (s, 1H), 6.73 (s, 1H), <sup>8</sup> 6.88 (dd, J = 8.1, 2.0 Hz, 1H), 6.89 (d, J = 8.4 Hz, 2H), 7.01 (d, J = 1.8 Hz, 1H), 7.07 (d, J = 8.4 Hz, 1H), 7.24 (d, J = 7.8 Hz, 2H), 7.35 (d, J = 7.8 Hz, 2H), 7.35 (d, J = 7.8 Hz, 2H), 7.48 (d, J = 8.4 Hz, 2H), <sup>8</sup> 11 (KBr) 3419, 1610, 1623, 1485, 1393, 1243, 1065, 1004, 972, 833, 795 cm <sup>-1</sup>

Table 165

1-833	mp141-142 °C  IH NMR (CDCl <sub>3</sub> )
1-834	
1.835	mp180-181 °C  1H NMR (CDCl <sub>3</sub> ) δ 3.51 (s, 3H), 3.75 (s, 3H), 5.17 (s, 2H), 5.70 (brs, 1H), 5.77 (brs, 1H), 6.45 (s, 1H), 6.95-7.10 (m, 4H), 7.27-7.46 (m, 8H), 7.96 (brs, 1H))  1.27-7.46 (m, 8H), 7.96 (brs, 1H))  1R(KBr) 3422, 3358, 1706, 1602, 1489, 1454, 1410, 1289, 1253, 1203, 1180, 1125, 1101, 1071, 1015 cm. 1
1-836	mp148-149 ℃ <sup>1</sup> H NMR (DMSO-d <sub>6</sub> ) δ 1.77 (s, 3H), 1.80 (s, 3H), 2.54 (s, 6H), 3.35 (s, 3H), 3.42 (s, 3H), 3.48 (s, 3H), 4.73 (d, J = 4.5 Hz, 2H), 5.60-5.63 (m, 1H), 7.30-7.54 (m, 8H) <sup>1</sup> R(KBr) 3495, 3293, 1764, 1712, 1616, 1359, 1359, 1243, 1175, 1147, 971, 866, 845 cm <sup>-1</sup>
1-837	mp136-138 ℃ <sup>1</sup> H NMR (DMSO-d <sub>6</sub> ) δ 2.32 (s, 3H), 2.50 (s, 6H), 3.31 (s, 3H), 3.35 (s, 3H), 3.44 (s, 3H), 5.23 (s, 2H), 7.21-7.47 (m, 12H) IR(KB <sub>7</sub> ) 3495, 3292, 3028, 2934, 1754, 1710, 1516, 1357, 1176, 1147, 972, 868, 842 cm <sup>-1</sup>

Table 166

	ည 961-196 ည
969	111 NMR (CINCIA) & 1.44 (t, J = 7.2 Hz, 3H), 3.46 (s, 3H), 3.69 (s, 3H), 3.86 (s, 6H), 4.44(q, J = 7.0 Hz, 2H), 5.15 (s, 2H),
000-1	5.66 (hrs, 1H), 5.72 (brs, 1H), 6.27 (s, 1H), 7.01 (s, 2H), 7.13 (s, 1H), 7.38-7.46 (m, 7H)
	IR(KBr) 3485, 2937, 1713, 1580, 1464, 1455, 1407, 1324, 1243, 1123, 1102, 1069, 1014, 763 cm <sup>-1</sup>
	mp 150-151 C
	111 NMR (DMSO-da) & 1.72 (8, 311), 1.76 (8, 311), 1.88 (8, 311), 1.90 (8, 311), 4.55 (d, J = 5.8 Hz, 211), 5.44-5.50 (m, 1H),
68:8:1	6.80-6.97 (m, 8H), 7.81 (brs, 1H), 8.85 (brs, 1H), 9.38 (brs, 1H)
	IR(KBr) 3495, 3293, 1753, 1711, 1429, 1390, 1360, 1242, 1217, 1178, 1143, 781 cm <sup>-1</sup>
	mp149.150 C
•	1H NMR (DMSO-d6) 6 1.71 (9, 3H), 1.75 (9, 3H), 2.00 (8, 6H), 2.59 (8, 3H), 4.57 (d, J = 6.4 Hz, 2H), 5.42-5.47 (m, 1H),
1-840	6.84-7.13 (m, 8H), 9.13 (brs, 1H), 9.50 (brs, 1H)
	IR(KBr) 3451, 2933, 1612, 1587, 1518, 1472, 1348, 1259, 1211, 1171, 1121, 1087, 969, 872, 835, 813 cm-1
	mp203.204 C
	1H NMR (DMSO-d6) 6 1.87 (8, 3H), 1.89 (8, 3H), 2.31 (8, 3H), 5.09 (8, 2H), 6.80-7.00 (m, 8H), 7.20 (d, J = 7.8 Hz, 2H), 7.39
1.841	(d, J = 7.8 Hz, 2H), 7.81 (brs, 1H), 8.97 (brs, 1H), 9.38 (brs, 1H)
	IR(KBr) 3491, 3398, 2921, 1611, 1516, 1476, 1259, 1183, 1155, 996, 794 cm <sup>-1</sup>
	mp128-129 °C
9,0	1H NMR (DMSO-d <sub>6</sub> ) 8 2.01 (s, 6H), 2.34 (s, 3H), 2.63 (s, 3H), 5.12 (s, 2H), 6.85-7.13 (m, 8H), 7.18 (d, J = 7.6 Hz, 2H), 7.36
1-842	(d, J = 7.6 Hz, 2H), 9.15 (brs, 1H), 9.55 (brs, 1H)
	IR(KBr) 3432, 3305, 1735, 1607, 1523, 1482, 1398, 1360, 1294, 1284, 1179, 1080, 816 cm <sup>-1</sup>

Table 167

1-843	mp203-204 °C 111 NMR (СЭСЪ) б 2.66 (в, ЭН), З.13 (в, ЭН), З.59 (в, ЭН), З.76 (в, ЭН), Б.19 (в, 2Н), 6.86 (в, 1Н), 7.13-7.69 (m, 11Н), 8.07
	(brs, 111) <u>IR(KBr) 3432, 3305, 1735, 1607, 1523, 1482, 1398, 1360, 1294, 1284, 1179, 1080, 816 cm<sup>-1</sup></u>
243	mp 109-110 °C 1H NMR (DMSO-da) & 1.36 (t, J = 7.2 Hz, 3H), 2.82 (s, 3H), 3.24 (s, 3H), 3.47 (s, 3H), 3.66 (s, 3H), 3.79 (s, 6H), 4.38 (q, J =
	7.0 Hz, 2H), 5.26 (s, 2H), 6.78 (s, 1H), 7.32-7.52 (m, 10H) IR(KBr) 3432, 2940, 1716, 1579, 1465, 1407, 1366, 1322, 1240, 1179, 1123, 1078, 815, 796 cm <sup>-1</sup>
1.845	mp 113-115 °C 11 NMR (CDCIs) & 2.25 (s, 3H), 2.27 (s, 3H), 3.20 (s, 3H), 5.20 (s, 2H), 7.03-7.15 (m, 5H), 7.33-7.51 (m, 9H))
	IR (CHCl.) 2925, 1618, 1580, 1521, 1455, 1373, 1314, 1299, 1268, 1174, 1149, 1126, 1018, 970, 874 cm <sup>-1</sup>
	mp 155-157 °C
1-846	111 NMR (CDCh) 6 2.26 (a, 6H), 4.69 (a, 1H), 5.19 (a, 2H), 6.87-6.90 (m, 2H), 7.03-7.15 (m, 5H), 7.22-7.50 (m, 7H)  1R (CHCh) 3596, 2952, 2924, 1612, 1582, 1523, 1490, 1455, 1425, 1383, 1259, 1171, 1125, 1012, 956, 877 cm <sup>-1</sup>
	mp 81-84 ℃
1-847	<sup>1</sup> H NMR (CDCl <sub>3</sub> ) δ 1.07-1.14 (m, 6H), 2.55-2.66 (m, 4H), 4.73 (s, 1H), 5.16 (s, 2H), 5.70 (s, 1H), 6.82-6.91 (m, 3H), 6.92-6.99 (m, 2H), 7.10-7.12 (d, J = 4.2 Hz, 2H), 7.22-7.25 (m, 2H), 7.38-7.49 (m, 5H)
	IR (CHCl <sub>3</sub> ) 3596, 3542, 2968, 2932, 2872, 1731, 1611, 1588, 1520, 1489, 1465, 1380, 1327, 1289, 1256, 1171, 1126, 1011,
	mp 125-127 °C
1-848	1H NMR (CDCl <sub>3</sub> ) δ 1.77 (8, 3H), 1.82 (8, 3H), 2.26 (8, 3H), 2.28 (8, 3H), 3.20 (8, 3H), 4.63-4.65 (d, J = 6.9 Hz, 2H), 5.56 (m,
	IR (CHCl <sub>3</sub> ) 2924, 1619, 1578, 1488, 1373, 1298, 1266, 1174, 1149, 1125, 970, 874 cm <sup>-1</sup>

Table 168

1.849	mp 141-143 ℃ 41 NMR (CDCl <sub>3</sub> ) δ 1.07-1.14 (m, 6H), 2.53-2.65 (m, 4H), 3.12 (s, 3H), 3.20 (s, 3H), 5.18 (s, 2H), 7.10-7.14 (m, 3H), 7.24-
	7.27 (m, 2H), 7.33-7.50 (m, 9H) IR (CHCh) 2969, 2934, 1614, 1517, 1487, 1371, 1331, 1289, 1263, 1173, 1149, 1111, 970, 938, 872 cm <sup>-1</sup>
	mp 90-91 ℃ '
1.850	1-850 111 NMR (CDCL <sub>3</sub> ) 6 2.13 (s, 3H), 2.29 (s, 3H), 2.35 (s, 3H), 3.16 (s, 3H), 5.21 (s, 2H), 6.87-6.90 (m, 2H), 7.09-7.49 (m, 11H)
	IR (CHCL <sub>1</sub> ) 3596, 1731, 1613, 1529, 1478, 1362, 1261, 1173, 1119, 1086, 1025, 972, 953, 874 cm <sup>-1</sup>
	mp 94-96 °C
100	1H NMR (CDCl3) 6 1.76-1.77 (d, J = 0.3 Hz, 3H), 1.81-1.82 (d, J = 0.9 Hz, 3H), 2.26 (s, 3H), 2.27 (s, 3H), 4.62-4.64 (d, J =
160.	6.9 Hz, 2H), 4.71 (s, 1H), 5.56 (m, 1H), 6.87-6.91 (m, 2H), 7.00-7.13 (m, 5H), 7.23-7.27 (m, 2H)
	IR (CHCl <sub>3</sub> ) 3596, 2923, 1675, 1613, 1579, 1523, 1490, 1386, 1297, 1171, 1124, 990, 956, 877, 836 cm <sup>-1</sup>
	mp 106-108 ℃
020	111 NMR (CDCl <sub>3</sub> ) δ 2.63 (s, 311), 3.52 (s, 3H), 3.77 (s, 3H), 5.24 (s, 2H), 6.84 (s, 1H), 6.84 (s, 1H), 7.12-7.20 (m, 3H), 7.35-
700-1	7.50 (m, 7H), 7.56-7.64 (m, 2H)
	IR (KBr) 2935, 1604, 1523, 1483, 1373, 1232, 1086, 1011, 945, 847, 728, 605, 523, 506 cm <sup>-1</sup>
	mp 136·138 °C
080	1H NMR (CDCl <sub>3</sub> ) 8 1.77 (s, 3H), 1.81 (s, 3H), 2.67 (s, 3H), 3.53 (s, 3H), 3.78 (s, 3H), 4.67 (d, J = 6.9 Hz, 2H), 5.47-5.53 (m,
1.003	1H), 6.84 (8, 1H), 7.10-7.19 (m, 3H), 7.31 (d, J = 2.1 Hz, 1H), 7.38 (dd, J = 2.1, 8.1 Hz, 1H), 7.57-7.64 (m, 2H)
	IR (KBr) 2936, 1604, 1523, 1484, 1435, 1373, 1225, 1086, 1011, 943, 848, 783, 606, 608 cm <sup>-1</sup>

Table 169

50	45	40	35	30	<b>25</b>	20	15	10	5
1-854	mp 128-130 °C III NMR (CDC <sub>3)</sub> 6.86 (s, 1H), 7.01 (m, 2H) IR (KBr) 2940, 10	30 °C (CDCE <sub>3</sub> )	H), 1.81 (s, 3H) z, 8.4 Hz, 1H) 4, 1418, 1366,	), 2.62 (s, 311), 7.10 (d, J = 1232, 1080,	), 3.52 (s, 3H), 1.8 Hz, 1H), 7. 984, 893, 838,	3.79 (s, 3H), 4 13-7.20 (m, 2F	1.63-4.67 (m, 2 1), 7.29 (d, J = cm <sup>-1</sup>	30 °C (CDCEs) & 1.74 (s, 3H), 1.81 (s, 3H), 2.62 (s, 3H), 3.52 (s, 3H), 3.79 (s, 3H), 4.63-4.67 (m, 2H), 5.45-5.53 (m, 1H), 3.70 (dd, J = 2.1 Hz, 8.4 Hz, 1H), 7.10 (d, J = 1.8 Hz, 1H), 7.13-7.20 (m, 2H), 7.29 (d, J = 8.4 Hz, 1H), 7.59-7.64 (2940, 1600, 1518, 1484, 1418, 1366, 1232, 1080, 984, 893, 838, 812, 621, 524 cm <sup>-1</sup>	1H),
1-855	mp 141-143 °C  111 NMR (CDCl <sub>3</sub> ) δ 1.76 (8, 3H), 1.82 (8, 3H), 2.61 (8, 3H), 3.53 (8, 3H), 3.77 (8, 3H), 4.62 (d, J = 6  111), 5.70 (8, 1H), 6.83 (8, 1H), 6.91 (dd, J = 2.1, 8.1 Hz, 1H), 6.96 (d, J = 8.1 Hz, 1H), 7.02 (d, J = 2  24H), 7.59-7.64 (m, 2H)  118 (KBr) 3531, 2931, 1604, 1520, 1484, 1372, 1233, 1175, 1083, 1011, 814, 800, 781, 727, 526 cm <sup>-1</sup>	6.83 (s, 1H), 6 1, 2H)	I), 1.82 (s, 3H] 3.91 (dd, J = 2,	), 2.61 (s, 3H) .1, 8.1 Hz, 1H 1233, 1175,	), 3.63 (s, 31l), 1), 6.96 (d, J = 1013, 81	3.77 (8, 3H), 4 8.1 Hz, 1H), 7. 4. 800, 781, 72	.62 (d, J = 6.9) .02 (d, J = 2.1)	43 °C (CDCL <sub>3</sub> ) & 1.76 (8, 3H), 1.82 (8, 3H), 2.61 (8, 3H), 3.53 (8, 3H), 3.77 (8, 3H), 4.62 (d, J = 6.9 Hz, 2H), 5.47-5.53 (m, (8, 1H), 6.83 (8, 1H), 6.91 (dd, J = 2.1, 8.1 Hz, 1H), 6.96 (d, J = 8.1 Hz, 1H), 7.02 (d, J = 2.1 Hz, 1H), 7.10-7.19 (m, 7.64 (m, 2H))  7.64 (m, 2H)  3531, 2931, 1604, 1520, 1484, 1372, 1233, 1175, 1083, 1011, 814, 800, 781, 727, 526 cm <sup>-1</sup>	3 (m,
1-856	mp 217-220 °C <sup>1</sup> H NMR (CDCl <sub>3</sub> ) δ 2.75 (a, 3H), 3.51 (a, 3H), 3.78 (a, 3H), 5.78 (a, 1H), 6.85 (a, 1H)  7.20 (m, 3H), 7.32 (d, J = 8.4 Hz, 1H), 7.58-7.63 (m, 2H) <sup>1</sup> R (KBr) 3434, 2941, 1611, 1487, 1423, 1363, 1209, 1076, 891, 818, 621, 573, 513 cm <sup>-1</sup>	6 2.75 (a, 31 2 (d, J = 8.4 Hz	H), 3.51 (s, 3H c, 1H), 7.58-7.(	l), 3.78 (s, 3H 53 (m, 2H) 1209, 1076, 8	(s, 5.78 (s, 1H)), 5.78 (s, 1H)	, 6.85 (s, 1H), 573, 513 cm <sup>-1</sup>	7.03 (dd, J = 1	20 °C (CDCl <sub>3</sub> )	7.111-
1-857	mp 183-185 °C <sup>1</sup> H NMR (CDCl <sub>3</sub> )	δ 1.92 (s, 3F 3-7.41 (m, 12H) 36, 1604, 1517	1), 3.20 (s, 3H ), 7.66-7.71 (m 7, 1482, 1362,	), 3.53 (s, 3H), 1, 2H), 1232, 1232, 1	), 3.78 (s, 3H),	3.93 (s, 3H), 4	1.31 (s, 4H), 6.7	79-6.83 (m, 2H), (	6.90-
1.858	mp 192-194 °C <sup>1</sup> H NMR (CDCl <sub>3</sub> )	δ 2.57 (s, 3H 68, 2937, 1622	I), 3.21 (s, 3H)	), 3.56 (s, 3H)	, 3.77 (s, 3H), 149, 1086, 96;	3.87 (s, 3H), 6 2, 869, 802, 52	.77-6.89 (m, 4] 5 cm <sup>-1</sup>	2.57 (s, 3H), 3.21 (s, 3H), 3.56 (s, 3H), 3.77 (s, 3H), 3.87 (s, 3H), 6.77-6.89 (m, 4H), 7.34-7.40 (m, 2H), 2937, 1622, 1524, 1481, 1359, 1174, 1149, 1086, 962, 869, 802, 525 cm <sup>-1</sup>	2H),

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Table 170

20.

	mp 210.212 τ.
	II NMR (CDC13) & 1.92 (8, 3H), 2.23 (8, 3H), 3.46 (8, 3H), 3.74 (8, 3H), 3.89 (8, 3H), 6.24 (8, 1H), 5.80 (8, 1H), 5.94 (8, 1H),
1.859	6.46 (s, 111), 6.90-6.96 (m, 111), 7.01 (d, J = 1.8 Hz, 114), 7.08 (dd, J = 1.8, 8.1 Hz, 114), 7.50-7.55 (m, 2H), 7.76 (s, 1H), 8.52
	(d, J = 8.1  Hz, 1  H),
	IR (KBr) 3420, 2938, 1636, 1610, 1526, 1496, 1398, 1225, 1164, 1073, 1026, 831 cm <sup>-1</sup>
	mp 183-185 °C
300	111 NMR (1)MSO-d <sub>6</sub> ) $\delta$ 2.43 (g, 611), 2.45 (s, 611), 5.13 (s, 211), 6.76-6.82 (m, 4H), 6.91 (dd, $J$ = 2.1, 8.4 Hz, 1H), 7.01 (d, $J$ = $2$ 1 NMR (1)MSO-d <sub>6</sub> )
098-1	8.4 Hz, 1H), 7.09 (d, J = 2.1 Hz, 1H), 7.31-7.43 (m, 5H), 7.48-7.53 (m, 2H), 9.02 (br s, 1H), 9.32 (br s, 1H)
	IR (KBr) 3600-2800(br), 1609, 1581, 1521, 1493, 1455, 1437, 1384, 1321, 1275, 1215, 1193, 1142, 1007 cm <sup>-1</sup>
	mp 172-174 C
	1H NMR (CDCl3) $\delta$ 2.50 (s, 6H), 2.53 (s, 6H), 3.11 (s, 3H), 3.19 (s, 3H), 5.18 (s, 2H), 6.89 (s, 1H), 6.93 (s, 1H), 7.12 (d, J =
1.861	8.4 Hz, 1H), 7.30-7.54 (m, 8H), 7.66-7.71 (m, 2H), 7.73 (d, J = 2.1 Hz, 1H)
	IR (KBr) 3600-2800(br), 1613, 1618, 1491, 1455, 1361, 1348, 1276, 1178, 1159, 1109, 970 cm <sup>-1</sup>
	mp 173-175 ℃
	1H NMR (CDCl <sub>3</sub> ) 6 1.77 (8, 3H), 1.82 (8, 3H), 2.51 (8, 6H), 2.53 (8, 6H), 3.19 (8, 3H), 3.22 (8, 3H), 4.63 (d, J = 7.2 Hz, 2H),
1.862	5.49-5.53 (m, 1H), 6.89 (s, 1H), 6.93 (s, 1H), 7.05 (d, J = 9.0 Hz, 1H), 7.26-7.35 (m, 2H), 7.51 (dd, J = 1.8, 8.1 Hz, 1H), 7.67-
	7.70 (m, 3H)
	IR (KBr) 3600-2800(br), 1519, 1491, 1363, 1331, 1291, 1257, 1175, 1147, 1105, 1013, 980, 966 cm <sup>-1</sup>
	mp 150-152 C
6	<sup>1</sup> H NMR (DMSO-d <sub>6</sub> ) $\delta$ 1.72 (s, 3H), 1.76 (e, 3H), 2.43 (s, 6H), 2.45 (s, 6H), 4.55 (d, $J = 6.6$ Hz, 2H), 5.47-5.51 (m, 1H),
1.863	6.78-6.83 (m, 4H), 6.90-7.06 (m, 3H), 7.38-7.42 (m, 2H), 8.87 (br s, 1H), 9.39 (br s, 1H)
	IR (KBr) 3600-2800(br), 1610, 1686, 1522, 1495, 1476, 1448, 1385, 1292, 1275, 1199, 1171, 1136, 985, 948 cm <sup>-1</sup>

Table 171

1-864	INP 175-177 °C 111 NMR (DMSO-da) & 2.44 (s, 1211), 5.13 (s, 411), 6.77 (s, 211), 6.90-7.09 (m, 811), 7.33-7.52 (m, 8H), 9.01 (s, 211) (s, 211) (r) (K18-) 3600-2800(br), 1582, 1518, 1491, 1454, 1384, 1328, 1270, 1242, 1191, 1141, 1123, 1046, 1006 cm <sup>1</sup>
1-865	
998-1	mp 180-182 °C <sup>1</sup> H NMR (CDCl <sub>3</sub> )
1-867	mp 165-168 $^{\circ}$ L <sup>1</sup> H NMR (I)MSO-d <sub>6</sub> ) $\delta$ 1.72 (s, 6H), 1.76 (s, 6H), 2.45 (s, 12H), 4.55 (d, $J=6.0$ Hz, 4H), 5.45-5.55 (m, 2H), 6.77 (s, 2H), 6.89-6.98 (m, 4H), 7.03-7.07 (m, 2H), 8.86 (br s, 2H) 177, 1238, 1195, 1142, 1126, 1050, 994 cm <sup>-1</sup> IR (KBr) 3600-2800(br), 1579, 1519, 1497, 1476, 1456, 1384, 1277, 1238, 1195, 1142, 1126, 1050, 994 cm <sup>-1</sup>
1-868	mp 76-78 °C  1H NMR (CDCl <sub>3</sub> ) & 3.47 (8, 3H), 3.75 (8, 3H), 3.94 (8, 3H), 5.15 (8, 2H), 5.68 (8, 1H), 5.69 (8, 1H), 5.92 (8, 1H), 6.46 (8, 1H),  6.93-7.15 (m, 5H), 7.22 (d, J = 1.5 Hz, 1H), 7.34-7.49 (m, 5H)  IR (CHCl <sub>3</sub> ) 3528, 1586, 1520, 1489, 1461, 1399, 1287, 1260, 1110, 1070, 1010, 907, 819 cm <sup>-1</sup>
I-869	mp 140-142 °C <sup>1</sup> H NMR (CDCl <sub>3</sub> ) δ 2.65 (8, 3H), 3.13 (8, 3H), 3.25 (8, 3H), 3.57 (8, 3H), 3.78 (8, 3H), 3.94 (8, 3H), 5.19 (8, 2H), 6.85 (8, 1H),  7.13-7.19 (m, 2H), 7.30-7.50 (m, 9H)  IR (CHCl <sub>3</sub> ) 1598, 1516, 1480, 1367, 1266, 1176, 1115, 1081, 1012, 969, 918, 867, 808 cm <sup>-1</sup>

Table 172

	mp 189-190 °C:
	111 NMR (CHOLE) 3 1.76 (d, J = 0.9 Hz, 3H), 1.81 (s, 3H), 2.69 (s, 3H), 3.24 (s, 3H), 3.25 (s, 3H), 3.58 (s, 3H), 3.78 (s, 3H),
1-870	3.94 (s, 3H), 4.64 (d, J = 6.6 Hz, 2H), 5.49 (m, 1H), 6.85 (s, 1H), 7.10 (d, J = 8.4 Hz, 1H), 7.17 (d.d, J = 2.1, 8.4 Hz, 1H),
<u></u>	7.30-7.42 (m, 4H)
	1R (CHCl <sub>13</sub> ) 2932, 1599, 1516, 1480, 1367, 1329, 1266, 1177, 1115, 1082, 1032, 1013, 970, 907, 868, 807 cm <sup>-1</sup>
	mp 187-190 C
ţ	111 NMR (CDCE) 6 2.38 (8, 311), 2.64 (8, 311), 3.13 (8, 311), 3.25 (8, 311), 3.58 (8, 311), 3.78 (8, 311), 3.94 (8, 311), 5.14 (8, 211),
1.8.	6.84 (s, 111), 7.13-7.24 (m, 411), 7.30-7.42 (m, 611)
	IR (CHCl <sub>13</sub> ) 2966, 1598, 1517, 1480, 1462, 1368, 1329, 1267, 1177, 1116, 1082, 1032, 970, 907, 867, 808 cm <sup>-1</sup>
	mp 192-194 C
	1H NMR (CDCl3) & 1.15 (t, J = 6.9 Hz, 3H), 1.76 (e, 3H), 1.82 (e, 3H), 2.59 (e, 3H), 3.69 (q, J = 6.9 Hz, 2H), 3.77 (e, 3H),
1.872	4.61 (d, J = 6.9 Hz, 2H), 4.99 (s, 1H), 5.50 (m, 1H), 5.70 (s, 1H), 6.84 (s, 1H), 6.88·6.97 (m, 3H), 7.02 (d, J = 1.8 Hz, 1H),
,	7.52.7.58 (m, 2H)
	IR (CHCl <sub>13</sub> ) 3536, 2934, 1609, 1520, 1482, 1410, 1365, 1279, 1243, 1172, 1128, 1080, 1029, 972, 952, 872, 833, 812 cm <sup>-1</sup>
	1H NMR (CDCl3) 6 3.46 (s, 3H), 3.70 (s, 2H), 3.74 (s, 3H), 3.75 (s, 3H), 5.15 (s, 2H), 5.67 (s, 1H), 5.90 (s, 1H), 6.47 (s, 1H),
1.873	6.96 (d.d, J = 8.4 & 1.8 Hz, 1H), 7.03 (d, J = 8.4 Hz, 1H), 7.09 (d, J = 1.8 Hz, 1H), 7.33 - 7.44 (m, 7H), 7.61 (.d, J = 8.4 Hz, 2H)
	IR (KBr) 3536,3389, 1732, 1587, 1519, 1487, 1438, 1393, 1249, 1217, 1166, 1110, 1069,1001cm <sup>-1</sup>
	1H NMR (CDCl <sub>3</sub> ) & 3.46 (8, 3H), 3.74 (8, 5H), 5.15 (8, 2H), 5.68 (8, 1H), 5.91 (6, 1H), 6.47 (8, 1H), 6.96 (d.d, J=8.4 & 1.8 Hz,
1-874	1H), $7.03$ (d, $J = 8.4$ Hz, 1H), $7.09$ (d, $J = 8.4$ Hz, 1H), $7.32 \cdot 7.49$ (m, 7H), $7.62$ (d, $J = 8.1$ Hz, 2H)
	IR (KBr) 3381, 1715, 1698, 1608, 1581, 1523, 1485, 1455, 1396, 1294, 1235, 1112, 1072,1017cm <sup>-1</sup>
	111 NMR (CDCl.3) 6 2.69 (8, 3H), 3.13 (8, 3H), 3.54 (8, 3H), 3.70 (8, 2H), 3.74 (8, 3H), 3.77 (8, 3H), 5.19 (8, 2H), 6.86 (8, 1H),
1-875	7.15 (d, $J = 8.7 \text{ Hz}$ , 1H), 7.30 - 7.40 (m, 9H), 7.59 (d, $J = 8.1 \text{ Hz}$ , 2H)
	IR (KBr) 1734, 1721, 1606, 1481, 1398, 1361, 1244, 1175, 1120, 1078, 1010cm <sup>-1</sup>

Table 173

	<b>45</b>	40	35	30	25	20	15	10	5
	(II NMR (CDCl <sub>3</sub> ) &	) 1.76 (s, 3II),	DCES) & 1.76 (8, 311), 1.81 (8, 311), 2.73 (8, 311), 3.23 (8, 311), 3.54 (8, 311), 3.70 (8, 211), 3.74 (8, 311), 3.77 (8, 311), 0.011,	.73 (s, 3H), 3.2	3 (8,3H), 3.54 (	3.54 (s, 3H), 3.70 (s, 2H), 3.74 (s, 2H), 3.74	2H), 3.74 (s,	s, 3H), 3.77 (s, 3H),	H),
1.876	(d, J = 8.1Hz,	7.39 (d, J =	2.1 Hz, 11H), 7.59 (d, J = 8.1Hz, 2H)	59 (d, J = 8.111		, 111), (111), (110)		z 2:1112, 111), 1	
	'HI NMR (CDCL <sub>5</sub> )	) 5. 1608, 1522.	1482, 1365, 117	77. 1117. 1078.	1013cm <sup>-1</sup>				
1.877	HINMR (CDCla) & 1.76 (8, 3H), 1.82 (8, 3H), 3.46 (8, 3H), 3.74 (8, 5H), 5.69 (8, 1H), 5.89 (8, 1H), 6.47 (8, 1H), 6.96 (8, 2H), 7.38 (6, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4,	1.76 (s, 3H),	OCI3) 8 1.76 (8, 3H), 1.82 (8, 3H), 3.46 (8, 3H), 3.74 (8, 5H), 3H), 4.62 (d, J = 6.9 Hz, 2H), 5.46 · 5.58 (m, 1H), 5.89 (8, 1H), 6.47 (8, 1H), 6.96 (8, 2H), 7.06 (8, 1H), 7.38 (d, J = 8.4 Hz, 2H), 7.62 (d, J = 8.4 Hz, 2H)	.46 (s, 3H), 3.7	4 (8, 5H), 3H), 7.38 (d. J = 8.4	4.62 (d, J = 6 $Hz 2H) 7.62$	9 Hz, 2H), 5.	46 · 5.58 (m, 1	Ę
		1.76 (s, 3H),	1.82 (s, 3H), 3.4	46 (s, 3H), 3.70	(s, 2H), 3.74 (ε	ı, 6H), 4.62 (d,	J = 6.9 Hz, 2	Н), 5.46 - 5.58 (	E
1-878		88 (s, 1H), 6.47 1734, 1609, 1	7 (s, 11H), 6.96 (. 586, 1520, 148	s, 2H), 7.06 (s, 7, 1439, 1396,	1H), 7.37 (d, J 1219, 1167, 11	= 8.4 Hz, 2H) <sub>1</sub> 11, 1068,1010	7.61 (d, J = { cm <sup>-1</sup>	8.4 Hz, 2H)	
	mp 136-139 °C    - H NMR (CDCh) 6 17 (hrs. 1H) 176 (s. 3H) 181 (s. 3H) 273 (s. 3H) 3.23 (s. 3H) 3.53 (s. 3H) 3.78 (s. 3H) 4.64 (d. J.=	17 (br.g. 1H)	1 76 (s. 3H) 1	8) (s 3H) 2.7	73 (g. 3H). 3.23	(a 3H) 3.53 (	3 3H) 3 78 (8	3H) 4 64 (d.	11
1.879	6.7 Hz, 2H), 4.78 (s,	2H), 5.49 (t, J	= 6.8 Hz, 1H),	6.87 (s, 1H), 7.	09 (d, J = 8.6 H	[z, 1H), 7.35 (d	ld, J = 8.6, 2.1	1 Hz, 1H), 7.40	g.
	J = 2.1  Hz, 111), 7.47 (d, $J = 8.1  Hz$ , 2H), 7.64 (d, $J = 8.1  Hz$ , 2H)	7 (d, J = 8.1  Hz)	r, 2H), 7.64 (d,	J = 8.1 Hz, 2H)					
	IR (KBr) 3553, 3434, 1481, 1389, 1363, 1235, 1175, 1084, 1011, 972, 806 cm <sup>-1</sup>	1, 1481, 1389, 1	1363, 1235, 117	5, 1084, 1011,	972, 806 cm <sup>-1</sup>				T
	mp 180-181 °C <sup>1</sup> H NMR (CDCl <sub>3</sub> ) § 1.70 (br s, 1H), 1.76 (s, 3H), 1.82 (s, 3H), 3.46 (s, 3H), 3.75 (s, 3H), 4.62 (d, J = 6.9 Hz, 2H), 4.77 (s,	1.70 (br s, 11	H), 1.76 (s, 3H)	, 1.82 (s, 3H),	3.46 (s, 3H), 3	.75 (8, 3H), 4.0	32 (d, J = 6.9	Hz, 2H), 4.77	
I-880	2H), 5.53 (t, J = 6.9 Hz, 1H), 5.69 (s, 1H), 5.89 (s, 1H), 6.47 (s, 1H), 6.94-6.96 (m, 2H), 7.05-7.07 (m, 1H), 7.46 (d, J = 8.1 Hz,	Hz, 1H), 5.69 (	(s, 1H), 5.89 (s,	1H), 6.47 (s, 11	H), 6.94-6.96 (n	n, 2H), 7.05-7.	07 (m, 1H), 7.	.46 (d, $J = 8.1  \text{F}$	z,
	211), $7.65$ (d, $J = 8.4$	Hz, 2H)							
	IR (KBr) 3509, 3367, 1522, 1487, 1461, 1396, 1289, 1249, 1213, 1116, 1071, 1009, 992, 942, 797, 782 cm <sup>-1</sup>	, 1522, 1487, 1	1461, 1396, 128	9, 1249, 1213,	1116, 1071, 10	09, 992, 942, 7	197, 782 cm <sup>-1</sup>		٦

Table 174

11 N 11 N 1-1881 4.64 2H) 1R (K	mp 122-123 °C 111 NMR (CDCl <sub>3</sub> )
	NMR (CDCl <sub>3</sub> ) & 1.77 (s, 3H), 1.82 (s, 3H), 2.34 (t, J = 6.5 Hz, 1H), 3.22 (s, 3H), 3.45 (s, 3H), 3.73 (s, 3H), 4.5 (m, 2H), 4 (d, J = 6.6 Hz, 2H), 5.56 (t, J = 6.6 Hz, 1H), 6.84 (s, 1H), 6.99-7.10 (m, 3H), 7.39 (d, J = 8.7 Hz, 2H), 7.71 (d, J = 8.7 Hz, 2H), 7.71 (d, J = 8.7 Hz, 2H), 15.59, 1518, 1471, 1360, 1261, 1230, 1148, 1019, 966, 881, 843 cm <sup>-1</sup> (KBr) 3579, 1518, 1471, 1360, 1261, 1230, 1148, 1019, 966, 881, 843 cm <sup>-1</sup> 156-158 °C  NMR (CDCl <sub>3</sub> ) & 1.76 (s, 3H), 1.81 (s, 3H), 2.49 (t, J = 6.6 Hz, 1H), 3.44 (s, 3H), 3.72 (s, 3H), 4.49 (br s, 2H), 4.63 (d, J = 8.9 Hz, 2H), 5.04 (s, 1H), 5.55 (t, J = 6.7 Hz, 1H), 6.85 (s, 1H), 6.92 (d, J = 8.9 Hz, 2H), 6.98-7.10 (m, 3H), 7.53 (d, J = 8.9 Hz, 2H), 5.04 (s, 1H), 5.55 (t, J = 6.7 Hz, 1H), 6.85 (s, 1H), 6.92 (d, J = 8.9 Hz, 2H), 6.98-7.10 (m, 3H), 7.53 (d, J = 8.9 Hz, 2H), 6.98-7.10 (m, 3H), 7.53 (d, J = 8.9 Hz, 2H), 6.98 (s, 1H), 6.98
	4 (d, J = 6.6 Hz, 2H), 5.56 (t, J = 6.6 Hz, 1H), 6.84 (s, 1H), 6.99-7.10 (m, 3H), 7.39 (d, J = 8.7 Hz, 2H), 7.71 (d, J = 8.7 Hz, 1 Hz, 2H), 7.71 (d, J = 8.7 Hz, 2H), 7.71 (d, J = 8.7 Hz, 2H), 7.39 (d, J = 8.9 Hz, 2H), 7.39 (d, J = 8.9 Hz, 2H), 6.98-7.10 (m, 3H), 7.53 (d, J = 8.9 Hz, 2H), 6.98-7.10 (m, 3H), 7.53 (d, J = 8.9 Hz, 2H), 8.90 (d, J = 8.9 Hz, 2H), 8.90 (d, J = 8.90 (d,
2H) IR (#	(KBr) 3579, 1518, 1471, 1360, 1261, 1230, 1148, 1019, 966, 881, 843 cm <sup>-1</sup> 156-158 °C NMR (CDCL <sub>3</sub> ) & 1.76 (s, 311), 1.81 (s, 311), 2.49 (t, J = 6.6 Hz, 111), 3.44 (s, 311), 3.72 (s, 311), 4.49 (br s, 2H), 4.63 (d, J = 11z, 211), 5.04 (s, 111), 5.55 (t, J = 6.7 Hz, 111), 6.85 (s, 111), 6.92 (d, J = 8.9 Hz, 2H), 6.98-7.10 (m, 3H), 7.53 (d, J = 8.9 Hz, 11z, 211), 5.04 (s, 114), 6.55 (t, J = 6.7 Hz, 114), 6.85 (s, J = 6.7 Hz, 114), 6.95 (d, J = 8.9 Hz, 2H), 6.98-7.10 (m, 3H), 7.53 (d, J = 8.9 Hz, 2H), 6.98 (s, J = 6.7 Hz, 114), 6.95 (s, J = 6.7 Hz, 114), 6.9
m m m	(KBr) 3579, 1518, 1471, 1360, 1261, 1230, 1148, 1019, 966, 881, 843 cm <sup>-1</sup> 156-158 °C NMR (CDCl <sub>3</sub> )
du	156-158 °C NMR (CDCt <sub>3</sub> )
=	NMR (CDCl <sub>3</sub> )
	Hz, 2H), 5.04 (s, 1H), 5.55 (t, J = 6.7 Hz, 1H), 6.85 (s, 1H), 6.92 (d, J = 8.9 Hz, 2H), 6.98-7.10 (m, 3H), 7.53 (d, J = 8.9 Hz, 1H),
1-882 6.71	
2H)	
IR (K	IR (KBr) 3433, 3234, 1609, 1520, 1472, 1266, 1227, 994, 836 cm <sup>-1</sup>
I dm	mp 168-170 ℃
	1H NMR (CDCl <sub>3</sub> ) & 2.50 (t, J = 6.5 Hz, 1H), 3.44 (s, 3H), 3.73 (s, 3H), 4.49 (br s, 2H), 4.78 (d, J = 6.1 Hz, 2H), 5.06 (s, 1H),
6.24	6.24 (t, J = 6.1 Hz, 1H), 6.85 (s, 1H), 6.93 (d, J = 8.6 Hz, 2H), 6.97.7.13 (m, 3H), 7.53 (d, J = 8.6 Hz, 2H)
IR (K	IR (KBr) 3544, 3412, 3267, 1613, 1621, 1475, 1263, 1229, 1011, 884, 816 cm <sup>-1</sup>
II du	mp153-154 C
	1H NMR (CDCl <sub>3</sub> ) & 3.49 (s, 3H), 3.77 (s, 3H), 5.17 (s, 2H), 5.76 (brs, 2H), 6.45 (s, 1H), 6.91-7.07 (m, 3H), 7.26-7.45 (m, 5H).
7.93	7.93 (d, J = 8.2 Hz, 2H), 8.00 (brs, 1H), 8.27 (d, J = 8.4 Hz, 2H)
IRK	IR(KBr) 3448, 2962, 2938, 1738, 1627, 1604, 1589, 1519, 1486, 1319, 1250, 1153, 1115, 1071, 1011 cm <sup>-1</sup>
8dur	mp81.82 C
	11 NMR (CDCl3) 6 1.51 (s, 3H), 1.54 (s, 3H), 1.74 (s, 3H), 1.77 (s, 3H), 2.70 (s, 3H), 3.24 (s, 3H), 3.60 (s, 3H), 3.78 (s, 3H),
1.889 4.38	4.38 (d, J = 7.5 Hz, 2H), 4.65 (d, J = 6.6 Hz, 2H), 6.86 (s, 1H), 7.06-7.11 (m, 3H), 7.35-7.41 (m, 2H), 7.52-7.57 (m, 1H)
IR(K	IR(KBr) 3433, 2938, 1699, 1618, 1621, 1481, 1367, 1209, 1178, 1115, 1081, 972, 950, 813, 793 cm <sup>-1</sup>

Table 175

	mp208-209 °C
	1H NMR (CHCL) 5 1.77 (s, 3H), 1.81 (s, 3H), 2.71 (s, 3H), 3.23 (s, 3H), 3.60 (s, 3H), 3.76 (s, 3H), 4.64 (d, J = 7.2 Hz, 2H),
1-886	5.49 (t, .) = 8.7 Hz, 1H), 6.85 (s, 1H), 7.09 (d, J = 8.7 Hz, 1H), 7.26-7.40 (m, 3H), 7.52-7.58 (m, 1H), 7.69-7.73 (m, 1H), 8.02
	(brs, 1H)
	IR(KBr) 3357, 2939, 1736, 1606, 1523, 1483, 1398, 1370, 1294, 1243, 1179, 1111, 1079, 965, 827, 814, 795 cm <sup>-1</sup>
	mp89.90 ℃
to	111 NMR (CDCI3) 6 2.34 (8, 311), 2.38 (8, 311), 2.64 (8, 311), 3.12 (8, 311), 3.53 (8, 3H), 3.77 (8, 3H), 4.92 (8, 2H), 5.14 (8, 2H),
1.88.1	6.83 (s, 1H), 6.89 (d, J = 8.7 Hz, 2H), 7.11-7.46 (m, 12H)
	IR(KBr) 3434, 2939, 1699, 1617, 1520, 1481, 1367, 1211, 1178, 1114, 1081, 952, 813, 794 cm <sup>-1</sup>
	mp181-182 C
	1H NMR (CDCl3) & 2.38 (s, 3H), 2.66 (s, 3H), 3.12 (s, 3H), 3.59 (s, 3H), 3.76 (s, 3H), 5.14 (s, 2H), 6.85 (s, 1H), 7.14-7.41 (m,
1-888	8H), 7.52-7.58 (m, 1H), 7.69-7.73 (m, 1H), 8.02 (brs, 1H)
	IR(KIBr) 3348, 3030, 2940, 1733, 1607, 1523, 1482, 1397, 1366, 1281, 1242, 1212, 1179, 1128, 1112, 1080, 971, 944, 815,
	799 cm <sup>-1</sup>
	mp165-157 C
000	1H NMR (CDCl <sub>3</sub> ) 6 1.46 (t, J = 7.0 Hz, 3H), 1.76 (s, 3H), 1.82 (s, 3H), 2.73 (s, 3H), 3.23 (s, 3H), 3.56 (s, 3H), 3.74 (s, 3H),
1-003	4.46 (q, J = 7.4 Hz, 2H), 4.65 (d, J = 7.2 Hz, 2H), 5.48-5.54 (m, 1H), 6.69 (s, 1H), 7.09 (d, J = 8.4 Hz, 2H), 7.28-7.47 (m, 4H)
	IR(KBr) 3434, 2938, 1716, 1579, 1477, 1464, 1409, 1366, 1241, 1178, 1124, 1078, 955, 815, 796 cm <sup>-1</sup>
	mp82-83 ℃
0001	1H NMIR (CDCl <sub>3</sub> ) & 2.67 (e, 3H), 3.13 (e, 3H), 3.58 (e, 3H), 3.80 (e, 3H), 5.19 (e, 2H), 6.84 (e, 1H), 7.13-7.49 (m, 8H), 7.89-
069-1	7.96 (m, 2H), 8.27 (brs, 1H), 8.27-8.31 (m, 1H)
	IR(KBr) 3447, 3033, 2940, 1743, 1521, 1482, 1367, 1312, 1272, 1249, 1178, 1119, 1080, 957, 817, 799 cm <sup>-1</sup>

Table 176

.

1-891	mp86-87 ℃ 111 NMR (CDCl <sub>34</sub> ) δ 2.68 (s, 3H), 3.10 (s, 3H), 3.15 (s, 3H), 3.62 (s, 3H), 3.81 (s, 3H), 5.22 (s, 2H), 6.85 (s, 1H), 7.16-7.50 (m, 9H), 7.88-7.94 (m, 2H) 118(KBr) 3413, 2938, 1519, 1483, 1366, 1313, 1162, 1119, 1090, 1079, 957, 812 cm <sup>-1</sup> 118(KBr) 3413, 2938, 1519, 1483, 1366, 1313, 1162, 1119, 1090, 1079, 957, 812 cm <sup>-1</sup> 11997-98 ℃ 111 NMR (CDCl <sub>3</sub> ) δ 1.53 (s, 3H), 1.55 (s, 3H), 1.76 (s, 3H), 1.78 (s, 3H), 3.63 (s, 3H), 3.75 (s, 3H), 4.26 (d, J = 7.4 Hz, 2H),
1.891	111 NMR (CDCl <sub>3</sub> )
168-1	911), 7.88-7.94 (m, 2H) $ \frac{118(KBr)}{1313, 1366, 1313, 1162, 1119, 1090, 1079, 957, 812~cm^{-1} \\ \frac{118(KBr)}{1313, 2938, 1519, 1483, 1366, 1313, 1162, 1119, 1090, 1079, 957, 812~cm^{-1} \\ \frac{11807-98}{111} \% 1.53 (s, 3H), 1.55 (s, 3H), 1.76 (s, 3H), 1.78 (s, 3H), 3.63 (s, 3H), 3.75 (s, 3H), 4.26 (d, J = 7.4 Hz, 2H), 118 NMR (CDCL) (s, 3H), 1.55 (s, 3H), 1.76 (s, 3H), 1.78 (s,$
	IR(KBr) 3413, 2938, 1519, 1483, 1366, 1313, 1162, 1119, 1090, 1079, 957, 812 cm <sup>-1</sup> mp97-98 °C HI NMR (CDCI <sub>3</sub> )
	mp97-98 °C HI CHICLE (8, 3H), 1.55 (8, 3H), 1.76 (8, 3H), 1.78 (8, 3H), 3.63 (8, 3H), 3.75 (8, 3H), 4.26 (d, J = 7.4 Hz, 2H),
	HI NMR (CHCL) 6 1.53 (9, 3H), 1.55 (9, 3H), 1.76 (9, 3H), 1.78 (9, 3H), 3.63 (9, 3H), 3.75 (9, 3H), 4.26 (d, J = 7.4 Hz, 2H),
1-892	4.62 (d, J = 6.8 Hz, 211), 5.65 (brs, 111), 5.72 (brs, 111), 6.84 (s, 111), 7.04-7.13 (m, 311), 7.35-7.43 (m, 2H), 7.51-7.58 (m, 1H)
	IR(KBr) 3453, 3379, 2973, 2931, 1719, 1629, 1529, 1490, 1406, 1313, 1288, 1247, 1193, 1101, 1072, 1015, 993, 816, 786
	cm. <sub>1</sub>
	mp89-90 °C
	III NMR (DMSO-ds) & 1.75 (s, 311), 1.78 (s, 311), 3.31 (s, 3H), 3.62 (s, 3H), 4.56 (d, J = 6.9 Hz, 2H), 5.52 (t, J = 6.0 Hz, 1H),
1-893	6.33 (s, 111), 6.34-6.47 (m, 2H), 6.74 (brs, 2H), 6.74-6.75 (m, 1H), 6.87-6.91 (m, 1H), 7.11-7.12 (m, 1H), 7.32-7.34 (m, 1H),
	8.52 (brs, 111), 8.75 (brs, 111)
	IR(KBr) 3424, 2933, 2614, 1719, 1625, 1585, 1523, 1488, 1408, 1287, 1247, 1125, 1070, 819, 788 cm.1
	mp 167-168 C
-	1H NMR (CDCl3) 6 2.31 (8, 3H), 2.38 (8, 3H), 3.52 (8, 3H), 3.76 (8, 3H), 4.91 (8, 2H), 5.13 (8, 2H), 5.65 (brs, 1H), 5.77 (brs,
1-894	1H), 6.85 (s, 1H), 6.84-6.93 (m, 2H), 7.10-7.44 (m, 12H)
	IR(KBr) 3425, 2933, 2614, 1719, 1625, 1585, 1522, 1488, 1408, 1287, 1247, 1125 cm <sup>-1</sup>
	mp93.94 C
<del></del>	1H NMR (DMSO-ds) & 2.11 (s, 3H), 3.34 (s, 3H), 3.62 (s, 3H), 5.10 (s, 2H), 6.32 (s, 2H), 6.41-6.49 (m, 2H), 6.65 (d, J = 9.3)
1.895	Hz, 1H), 6.78 (s, 1H), 6.95 (d, J = 8.7 Hz, 1H), 7.09-7.14 (m, 1H), 7.22 (d, J = 8.4 Hz, 2H), 7.41 (d, J = 8.1 Hz, 2H), 8.49 (brs,
	1H), 8.87 (brs, 1H)
	IR(KBr) 3424, 2932, 1717, 1626, 1585, 1523, 1488, 1409, 1248, 1125, 1106, 1070, 811, 793 cm <sup>-1</sup>

Table 177

5	
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55

	mp 1/19-150 °C
	11 NMR (DMSO-d <sub>6</sub> ) $\delta$ 1.72 (8, 311), 1.77 (8, 311), 3.32 (8, 311), 3.55 (8, 311), 3.76 (8, 611), 4.55 (4, $J = 6.3$ Hz, 211), 5.50 (t, $J = 1$
1-896	6.6 Hz, 1H), 6.15 (s, 1H), 6.68 (d, J = 2.1 Hz, 1H), 6.91 (d, J = 8.7 Hz, 1H), 7.30 (s, 2H), 8.41 (brs, 1H), 8.74 (brs, 1H)
	IR(KBr) 3423, 2936, 1694, 1578, 1459, 1410, 1319, 1229, 1126, 1067 cm <sup>-1</sup>
	mp107.108 C
	111 NMR (CDCIs) & 2.70 (8, 3H), 3.12 (8, 3H), 3.55 (8, 3H), 3.72 (8, 3H), 3.78 (8, 6H), 5.18 (8, 2H), 6.65 (8, 1H), 6.70 (d, J =
768-1	4.2 Hz, 1H), 7.11 (d, J = 8.4 Hz, 1H), 7.26.7.48 (m, 9H)
	IR(KBr) 3434, 2941, 1517, 1488, 1366, 1353, 1261, 1177, 1102, 1074, 844, 818, 796 cm <sup>-1</sup>
	powder
0001	1H NMR (CDCl <sub>3</sub> ) δ 1.63 (s, 3H), 1.70 (s, 3H), 3.48 (s, 3H), 3.73-3.76 (m, 7H), 3.87 (s, 3H), 4.98 (s, 1H), 5.24-5.32 (m, 2H),
1.636	5.90 (8, 1H), 6.47 (s, 1H), 6.89-7.02 (m, 5H), 7.51-7.57 (m, 2H)
	IR (KBr) 3447, 2930, 1612, 1523, 1488, 1465, 1398, 1230, 1120, 1080, 1037, 818, 592 cm <sup>-1</sup>
	mp 171-173 °C
300	1H NMR (CDCl <sub>3</sub> ) δ 1.73 (9, 3H), 1.76 (8, 3H), 3.48 (9, 3H), 3.73-3.76 (m, 5H), 4.23 (6, 1H), 4.92 (8, 1H), 5.37-5.43 (m, 1H),
1-833	5.84 (s, 1H), 6.46 (s, 1H), 6.70 (d, J = 8.1 Hz, 1H), 6.86-7.01 (m, 5H), 7.51-7.56 (m, 2H)
	IR (KBr) 3392, 2934, 1612, 1526, 1489, 1398, 1222, 1116, 1075, 829, 590 cm <sup>-1</sup>
	mp 78-79 °C
000	1H NMR (CDCl <sub>3</sub> ) δ 2.14 (8, 3H), 2.29 (8, 3H), 2.36 (8, 3H), 3.16 (8, 3H), 3.20 (8, 3H), 5.22 (8, 2H), 7.10 (8, 1H), 7.16 (d, J=
006-1	8.7 Hz, 1H), 7.22-7.49 (m, 11H)
	IR (CHCl.) 2939, 1612, 1516, 1476, 1415, 1370, 1291, 1269, 1174, 1150, 1119, 1087, 1018, 971, 954, 873 cm <sup>-1</sup>

Table 178

	mp 114-116 C
	111 NMR (CDCM <sub>3</sub> ) $\delta$ 1.08-1.14 (m, 6H), 1.77 (s, 3H), 1.81-1.82 (d, $J=0.6$ Hz, 3H), 2.53-2.65 (m, 4H), 3.21 (s, 3H), 3.23 (s,
1.901	3H), 4.62-4.65 (d, J = 6.6 Hz, 2H), 5.52 (m, 1H), 7.04-7.13 (m, 2H), 7.23-7.26 (m, 2H), 7.32-7.42 (m, 5H)
	IR (CHCh.) 2970, 2934, 2874, 1674, 1614, 1572, 1517, 1487, 1415, 1370, 1331, 1288, 1262, 1172, 1149, 1109, 971, 937, 872,
	849 cm·l
	np 97-99 C
	111 NMR (CDCL <sub>3</sub> ) $\delta$ 1.07-1.14 (m, 611), 1.77 (s, 311), 1.83 (s, 311), 2.55-2.66 (m, 411), 4.61-4.64 (d, $J = 6.6$ Hz, 211), 5.06 (s,
1.902	111), 5.54 (m, 111), 5.77 (s, 111), 7.24.7.64 (m, 411), 6.97 (d, J = 2.1 Hz, 111), 7.10.7.12 (d, J = 5.7 Hz, 211), 7.23.7.26 (m, 211)
	836 cm.¹
	mp 69-71 %
	1H NMR (CDCL3) 6 1.78 (s, 3H), 1.82 (s, 3H), 2.15 (s, 3H), 2.30 (s, 3H), 2.43 (s, 3H), 2.43 (s, 3H), 3.21 (s, 3H), 3.27 (s, 3H),
1.903	4.64-4.67 (d, J = 6.9 Hz, 2H), 5.50 (s, 2H), 7.10-7.13 (d, J = 9.9 Hz, 2H), 7.23-7.29 (m, 2H), 7.34-7.42 (m, 5H)
	IR (CHCh.) 2939, 1612, 1616, 1476, 1415, 1370, 1331, 1290, 1268, 1174, 1160, 1119, 1086, 971, 954, 873 cm.
	mp 125-127 °C
3	<sup>1</sup> H NMR (CDCl <sub>1</sub> ) 6 2.27 (s, 6H), 3.91 (s, 3H), 4.88 (br, 1H), 5.20 (s, 2H), 6.83-6.96 (m, 5H), 7.12-7.13 (d, J = 4.5 Hz, 2H),
1-904	7.22-7.50 (m, 7H)
	IR (CHCl <sub>3</sub> ) 3596, 2957, 2936, 1611, 1586, 1522, 1490, 1464, 1454, 1326, 1257, 1172, 1138, 1033, 835 cm <sup>-1</sup>
	mp 145-146 C
	<sup>1</sup> H NMR (CDCl <sub>3</sub> ) δ 2.26 (s, 3H), 2.28 (s, 3H), 3.20 (s, 3H), 3.91 (s, 3H), 5.21 (s, 2H), 6.83 (dd, J = 8.1, 2.1 Hz, 1H), 6.91-
006-1	6.96 (m, 2H), 7.11 (s, 1H), 7.15 (s, 1H), 7.32-7.50 (m, 9H)
	IR (CHCl <sub>3</sub> ) 2938, 1604, 1584, 1519, 1488, 1464, 1454, 1373, 1330, 1260, 1175, 1149, 1033, 1018, 970, 873, 847 cm <sup>-1</sup>

Table 179

1-906	mp 132-134 °C  "H NMR (CDCha) & 2.27 (s, 311), 2.87, (s, 311), 3.91 (s, 311), 5.16 (s, 211), 5.21 (s, 211), 5.70 (s, 111), 6.82-6.86 (m, 211), 6.92-  7.00(m, 411), 7.13 (s, 211), 7.32-7.50 (m, 1011)  1R (CHCha) 3542, 2936, 2871, 1585, 1519, 1491, 1454, 1382, 1322, 1273, 1175, 1137, 1014, 897, 877, 867, 2871.
1.907	
1.908	
606-1	mp 170-172 °C  14 NMR (DMSO-ds) δ 1.72 (s, 3H), 1.76 (s, 3H), 3.31 (s, 3H), 3.63 (s, 3H), 4.54 (d, J = 6.5 Hz, 2H), 5.17 (s, 2H), 5.49 (t, J = 6.5 Hz, 1H), 6.36 (s, 1H), 6.63 (d, J = 8.4 Hz, 2H), 6.63 (dd, J = 8.4, 2.1 Hz, 1H), 6.72 (d, J = 2.1 Hz, 1H), 6.88 (d, J = 8.4 Hz, 1H), 7.31 (d, J = 8.4 Hz, 2H), 8.40 (s, 1H), 8.70 (s, 1H)  11 (KBr) 3416, 3329, 1614, 1523, 1489, 1408, 1242, 1219, 1115, 1070, 997, 817, 787 cm <sup>-1</sup>

Table 180

	mp 207-209 °C   1.54 (8, 911), 2.69 (8, 311), 3.12 (8, 311), 3.52 (8, 311), 3.77 (8, 311), 5.18 (8, 211), 6.56 (8, 111), 6.85 (8, 111), 11 NMR (CDCl <sub>3</sub> ) & 1.54 (8, 911), 2.69 (8, 311), 3.12 (8, 311), 3.52 (8, 311), 3.77 (8, 311), 5.18 (8, 211), 6.56 (8, 111), 6.85 (8, 111), 11 NMR (CDCl <sub>3</sub> )
016-1	7.14 (d, J = 8.7 Hz, 1H), 7.32-7.48 (m, 9H), 7.57 (d, J = 8.7 Hz, 2H)
-	IR (KBr) 3373, 1734, 1525, 1369, 1227, 1177, 1158, 1080, 816, 793 cm.1
	mp 214-216 °C
	11 NMR (1)MSO-ds) & 2.84 (8, 311), 3.33 (8, 311), 3.46 (8, 311), 3.75 (8, 311), 5.26 (8, 2H), 5.30 (8, 2H), 6.66 (4, J = 8.4 Hz,
<u>.</u>	211), 6.93 (e, 111), 7.24-7.45 (m, 811), 7.52 (m, 211)
	IR (KBr) 3468, 3386, 1604, 1523, 1482, 1392, 1361, 1175, 1085, 815 cm <sup>-1</sup>
	mp 215-218 °C
	1H NMR (CDCl <sub>3</sub> ) & 2.67 (s, 3H), 3.13 (s, 3H), 3.53 (s, 3H), 3.78 (s, 3H), 5.19 (s, 2H), 6.86 (s, 1H), 7.15 (d, J = 8.4 Hz, 1H),
1.912	7.32.7.48 (m, 7H), 7.69 (s, 4H), 8.02 (br s, 1H)
	IR (KBr) 3307, 1733, 1482, 1393, 1361, 1284, 1177, 1084, 1012, 967, 945, 816 cm <sup>-1</sup>
	mp 203-205 ℃
	111 NMR (CDCL) 5 1.77 (8, 3H), 1.81 (8, 3H), 2.71 (8, 3H), 3.24 (8, 3H), 3.54 (8, 3H), 3.79 (8, 3H), 4.64 (d, J = 6.8 Hz, 2H),
1.913	5.50 (t, J = 6.8 Hz, 1H), 6.86 (s, 1H), 7.09 (d, J = 8.4 Hz, 1H), 7.35 (dd, J = 8.4, 2.0 Hz, 1H), 7.39 (d, J = 2.0 Hz, 1H), 7.69 (s,
	4H), 8.01 (br s, 1H)
	IR (KBr) 3311, 1735, 1482, 1393, 1362, 1177, 1083, 976, 945, 818 cm <sup>-1</sup>
	Ţ 701.001 qm
	1H NMR (CDCl <sub>3</sub> ) & 1.76 (8, 3H), 1.80, (8, 3H), 2.27 (8, 3H), 2.29 (8, 3H), 3.20 (8, 3H), 3.89 (8, 3H), 4.63-4.65 (0, J = 5.5 IIZ,
1.914	2H), 5.57 (m, 1H), 6.87-6.96 (m, 3H), 7.12 (s, 1H), 7.17 (s, 1H), 7.33-7.43 (m, 4H)
	IR (CHCl <sub>3</sub> ) 2937, 2866, 1604, 1583, 1519, 1488, 1464, 1373, 1331, 1259, 1175, 1149, 1035, 979, 673 cm

Table 181

1.915	mp 164-165 °C 111 NMR (CDCl3) & 1.75-1.76 (d, J = 0.6 Hz, 3H), 1.79-1.80 (d, J = 0.9 Hz, 3H), 2.27 (s, 3H), 2.28 (s, 3H), 3.89 (s, 3H), 4.62-4.65 (d, J = 6.6 Hz, 2H), 4.78 (br, 1H), 5.57 (m, 1H), 6.86-6.96 (m, 4H), 7.12 (s, 1H), 7.15 (s, 1H), 7.22-7.27 (m, 3H) 111 (CHCl3) 3596, 2936, 2865, 1676, 1611, 1584, 1522, 1490, 1464, 1385, 1327, 1257, 1172, 1138, 1100, 1035, 996, 962, 896.
1.916	mp172-173 °C III NMR (CDCh <sub>3</sub> )
1.917	m <sub>1</sub> 78-80 ℃ 1H NMR (CI)Cl <sub>3</sub> ) δ 3.47 (e, 3H), 3.69 (e, 6H), 3.80 (e, 6H), 5.14 (e, 2H), 5.66 (brs, 1H), 5.76 (brs, 1H), 6.30 (e, 1H), 6.69 (d, J = 8.2 Hz, 2H), 7.02 (e, 2H), 7.14 (s, 1H), 7.34-7.46 (m, 6H) IR(KBr) 3443, 2935, 1614, 1587, 1517, 1470, 1250, 1110, 744 cm <sup>-1</sup>
1.918	mp83-84 ℃ <sup>1</sup> H NMR (DMSO-d <sub>6</sub> ) δ 3.34 (s, 3H), 3.72 (s, 3H), 5.13 (s, 2H), 5.72 (brs, 2H), 6.41 (s, 1H), 6.62-6.93 (m, 4H), 7.32-7.61 (m, 7H), 8.54 (brs, 1H), 8.88 (brs, 1H) <sup>1</sup> H (DMSO-d <sub>6</sub> ) 3398, 2936, 1731, 1633, 1586, 1521, 1489, 1455, 1432, 1402, 1291, 1216, 1112, 1071 cm <sup>-1</sup>
I-919	mp74-75 °C 1H NMR (CDCl <sub>3</sub> ) δ 2.02 (e, 6H), 3.11 (e, 3H), 3.21 (e, 3H), 5.02 (brs, 1H), 5.18 (e, 2H), 6.96 (s, 1H), 7.04-7.18 (m, 3H), 7.37-7.59 (m, 9H) IR(KBr) 3503, 3032, 2937, 1513, 1474, 1365, 1289, 1197, 1175, 1149, 1114, 970, 867, 811 cm <sup>-1</sup>

Table 182

	mp78-79 ℃
1.920	H NMR (CDCs) 0 1.73 (8, 311), 1.70 (8, 411), 1.53 (8, 111), 6.57 (8, 111), 6.547 (8, 111), 6.547.05 (m, 311), 7.53 (d, J = 8.0 Hz, 111), 7.86 (d, J = 6.8 Hz, 211), 5.41-5.55 (m, 211), 5.73 (s, 111), 5.82 (s, 111), 6.47 (s, 111), 6.547 (s,
	111 NMR (CDCE) & 2.10 (s, 311), 2.18 (s, 311), 2.47 (s, 311), 3.12 (s, 311), 3.23 (s, 311), 5.20 (s, 211), 7.09-7.21 (m, 311), 7.39-
1.921	7.51 (m, 811), 7.60 (d, J = 8.4 Hz, 211).
	IR(KBr) 3433, 3033, 2937, 1516, 1470, 1360, 1291, 1267, 1176, 1150, 1119, 976, 857 cm <sup>-1</sup>
	mp 170-172 ℃
	111 NMR (1)MSO- $d_6$ ) $\delta$ 3.36 (8, 311), 3.66 (8, 311), 4.22 (br d, J = 2.5 11z, 2H), 4.50 (t, J = 4.5 Hz, 1H), 4.57 (d, J = 5.7 Hz,
1.922	2H), 4.60 (d, J = 5.7 Hz, 2H), 4.97 (t, J = 5.7 Hz, 2H), 5.17 (e, 2H), 5.23 (t, J = 5.7 Hz, 1H), 6.93 (e, 1H), 7.04 (d, J = 8.4 Hz,
	1H), 7.14 (dd, J = 8.4, 2.3 Hz, 1H), 7.28-7.37 (m, 2H), 7.40-7.45 (m, 4H), 7.49-7.53 (m, 2H), 7.61 (d, J = 8.1 Hz, 2H)
	IR (KBr) 3322, 1462, 1385, 1228, 1037, 1006, 750, 700 cm <sup>-1</sup>
	mp 130-132 C
	1H NMR (CDC13) 6 1.55 (s, 9H), 1.62 (s, 3H), 2.30 (s, 12H), 3.00 (s, 6H), 6.73 (br s, 1H), 6.78-6.82 (m, 2H), 7.07-7.14 (m,
1.923	4H), 7.24-7.27(m, 2H), 8.07-8.13 (m, 2H)
	IR (KBr) 3600-2800(br), 1732, 1624, 1610, 1583, 1530, 1493, 1366, 1347, 1320, 1236, 1164 cm <sup>-1</sup>
	1H NMR (CDCl3) 6 2.27 (8, 3H), 2.30 (8, 3H), 3.00 (8, 6H), 3.74 (br s, 2H), 6.77-6.85 (m, 3H), 6.96 (dd, J = 1.8, 8.1 Hz, 1H),
1.924	7.03 (dd, J = 2.1, 12.0 Hz, 1H), 7.09 (e, 1H), 7.13 (e, 1H), 7.24-7.29 (m, 2H)
	IR (KBr) 3600-2800(br), 1631, 1608, 1680, 1530, 1487, 1436, 1363, 1233, 1195 cm <sup>-1</sup>

Table 183

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Table 184

	mp 212-215 C
08:6-1	111 NMR (DMSO-dc) & 2.83 (s, 311), 3.43 (s, 311), 3.45 (s, 311), 3.52 (s, 311), 3.79 (s, 311), 4.87 (s, 211), 7.08 (s, 111), 7.21 (d, J = 3.411, 111), 7.21 (d, J = 3.411, 2.11)
	IR (Nujol) 1731, 1604, 1519, 1480, 1237, 1174, 1081, 1013, 876, 839, 822, 804 cm <sup>-1</sup>
	mp 166-168C
	11 NMR (CDCE) 5 3.45 (8, 3H), 3.75 (8, 3H), 4.67 (d, J = 9.0 Hz, 2H), 6.45 (8, 1H), 6.78 (t, J = 9.0 Hz, 1H), 6.92 (d, J = 8.7
<u> </u>	11z, 211), 6.92 (d, J = 8.4 Hz, 111), 6.98 (dd, J = 8.4, 2.1 Hz, 111), 7.09 (d, J = 2.1 Hz, 111), 7.53 (d, J = 8.7 Hz, 211)
	IR (Nujol) 3399, 1611, 1588, 1523, 1488, 1460, 1224, 1113, 1070, 1012, 939, 825, 813, 795 cm <sup>-1</sup>
	foam
	1H NMR (CDCl3) $\delta$ 3.45 (s, 3H), 3.75 (s, 3H), 4.64~4.74 (m, 3H), 6.45 (s, 1H), 6.92 (d, $J = 8.7$ Hz, 2H), 6.93 (d, $J = 8.4$ , Hz,
1.932	111), 6.97 (dd, J = 8.4, 2.1 Hz, 1H), 7.08 (d, J = 2.1 Hz, 1H), 7.53 (d, J = 8.7 Hz, 2H)
	IR (Nujol) 3570, 3461, 3357, 3180, 1753, 1616, 1696, 1624, 1495, 1408, 1313, 1287, 1264, 1240, 1200, 1114, 1073, 1011,
	906, 825 cm <sup>-1</sup>
	mp 120-123 C
	III NMR (CDC):) $\delta$ 1.69 (s, 3H), 1.74 (s, 6H), 1.80 (s, 3H), 3.49 (s, 3H), 6.68-3.75 (m, 5H), 4.58 (d, $J = 6.6$ Hz, 2H), 5.31-
1-933	5.41 (m, 1H), 5.50-5.56 (m, 1H), 5.81 (a, 1H), 6.46 (a, 1H), 6.68-6.74 (m, 2H), 6.85-6.93 (m, 3H), 7.50-7.56 (m, 2H)
	IR (KBr) 3460, 2969, 2929, 1609, 1523, 1490, 1398, 1247, 1117, 1078, 1013, 824, 778, 708, 589 cm <sup>-1</sup>
	mp 171-173 ℃
3	<sup>1</sup> H NMR (CI)CI <sub>3</sub> ) $\delta$ 1.75 (8, 3H), 1.80 (8, 3H), 3.47 (8, 3H), 3.73 (8, 3H), 3.81 (8, 2H), 4.58 (d, J = 6.9 Hz, 2H), 5.50-5.57 (m,
1-934	1H), 5.82 (s, 1H), 6.44 (s, 1H), 6.77-6.94 (m, 5H), 7.50-7.55 (m, 2H)
	IR (KBr) 3382, 3320, 2929, 1613, 1523, 1490, 1405, 1262, 1221, 1120, 1067, 1011, 844, 818, 598 cm <sup>-1</sup>

Table 185

1-935	mp 220-221 °C
1.936	mp 149-150 °C:  11 NMR (CDCla) & 1.48 (s, 3H), 1.67 (s, 3H), 1.76 (s, 3H), 1.80 (s, 3H), 3.63 (s, 3H), 3.74 (s, 3H), 4.27 (d, J = 7.5 Hz, 2H),  4.63 (d, J = 6.6 Hz, 2H), 5.01 (s, 1H), 5.20-5.28 (m, 1H), 5.52-5.60 (m, 1H), 6.66 (s, 1H), 6.91 (d, J = 8.7 Hz, 2H), 7.01 (t, J = 8.7 Hz, 1H), 7.10-7.22 (m, 2H), 7.48 (d, J = 8.7 Hz, 2H)  11 (Kh), 3.335, 2936, 1671, 1614, 1596, 1522, 1441, 1403, 1369, 1265, 1233, 1111, 1077, 1008, 945, 832 cm <sup>-1</sup>
1-937	mp 122-123 °C <sup>1</sup> H NMR (CDCl <sub>3</sub> ) δ 3.44 (s, 3H), 3.76 (s, 3H), 4.77 (d, J = 6.3 Hz, 2H), 5.05 (s, 1H), 6.04 (s, 1H), 6.24 (t, J = 6.3 Hz, 1H), <sup>6</sup> .45 (s, 1H), 6.92 (d, J = 8.7 Hz, 2H) 7.01 (t, J = 8.7 Hz, 1H), 7.19-7.30 (m, 2H), 7.53 (d, J = 8.7 Hz, 2H) <sup>1</sup> IR (KBr) 3582, 3502, 3237, 2950, 1614, 1624, 1490, 1453, 1403, 1301, 13267, 1231, 1112, 1073, 1019, 881, 827 cm <sup>-1</sup>
1.938	mp143·144 °C  11 (1) (2) (2) (3) (3) (4) (5) (5) (6) (7) (7) (7) (8) (7) (7) (7) (7) (7) (7) (7) (7) (7) (7
1.939	mp80-81 °C  14 (CDCl <sub>3</sub> )

Table 186

1-940	mp71-72 °C 111 NMR (CDCh <sub>3</sub> ) & 1.76 (s, 3H), 1.81 (s, 3H), 2.73 (s, 3H), 3.21 (s, 3H), 3.55 (s, 3H), 3.72 (s, 3H), 3.78 (s, 6H), 4.63 (d, J = 6.8 Hz, 2H), 5.46-5.52 (m, 1H), 6.65 (s, 1H), 6.70 (d, J = 3.8 Hz, 2H), 7.07 (d, J = 8.4 Hz, 1H), 7.34-7.46 (m, 3H) 118 (KBr) 3433, 2938, 1674, 1609, 1587, 1518, 14732, 1365, 1252, 1178, 1109, 1077, 971, 945, 815, 796 cm <sup>-1</sup>
1.941	mp98-99 °C III NMR (CDCh) & 1.74 (s, 3H), 1.78 (s, 3H), 3.50 (s, 3H), 3.71 (s, 3H), 3.72 (d, J = 8.1 Hz, 2H), 5.35 (t, J = 7.2 Hz, 1H), 5.64 (s, 1H), 5.77 (s, 1H), 6.43 (s, 1H), 7.02-7.15 (m, 3H), 7.32-7.41 (m, 2H), 7.49-7.56 (m, 1H) IR(KBr) 3408, 2934, 1627, 1529, 1491, 1444, 1405, 1246, 1175, 1102, 1069, 822, 783 cm <sup>-1</sup>
1.942	<sup>1</sup> H NMR (CDCh <sub>3</sub> ) δ 1.77 (s, 3H), 1.82 (s, 3H), 2.68 (s, 3H), 2.73 (s, 3H), 3.26 (s, 3H), 3.60 (s, 3H), 3.81 (s, 3H), 4.65 (d, J = 6.3 Hz, 2H), 5.44 · 5.53 (m, 1H), 6.87 (s, 1H), 7.10 (d, J = 8.7 Hz, 1H), 7.30 · 7.47 (m, 3H), 7.84 (d.d, J = 7.8 & 2.1 Hz, 1H), 8.22 (d, J = 2.1Hz, 1H)  8.22 (d, J = 2.1Hz, 1H)  IR (KBr) 1530, 1480, 1362, 1272, 1237, 1179, 1077cm <sup>-1</sup>
[-943	111 NMR (CDCl <sub>3</sub> ) δ 2.69 (8, 3H), 3.12 (8, 3H), 3.56 (8, 3H), 3.77 (8, 3H), 3.84 (8, 2H), 5.18 (8, 2H), 6.82 (8, 1H), 6.84 (d, J = 1.943 8.1 Hz, 1H), 7.14 (d, J = 8.4 Hz, 1H), 7.21 · 7.50 (m, 9H)  11.943 8.1 Hz, 1H), 7.14 (d, J = 8.4 Hz, 1H), 7.21 · 7.50 (m, 9H)  11.943 18.1 Hz, 1H), 7.14 (6, J = 8.4 Hz, 1H), 7.21 · 7.50 (m, 9H)
1-944	., 2H), 5.48 · E = 12.3 & 1.8H
1.945	1.945 (6.97 (8, 1H), 7.04 - 7.12 (m, 1H), 7.31 - 7.52 (m, 9H) (6.93, 3H), 6.80 - 6.86 (m, 1H), 6.93 (d.d., J = 10.7 & 2.1Hz, 1H), 1.945 (8, 1H), 7.04 - 7.12 (m, 1H), 7.31 - 7.52 (m, 9H) (1.945 (8, 1H), 7.04 - 7.12 (m, 1H), 7.31 - 7.52 (m, 9H)

Table 187

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50	<u>4</u> 5	40	35	30	25	20	15	10	5
1.946	1H NMR (CDCl <sub>3</sub> ) δ 2.02 (8, 6H), 2.15 (8, 3H), 3.20 (8, 3H), 5.14 (d, J = 3.9 Hz, 1H), 6.81 · 6.86 (m, 1H), 6.91 (d.d, J = 10.1 & 2.1 Hz, 1H), 6.97 (s, 1H), 7.04 · 7.12 (m, 1H), 7.30 · 7.42 (m, 4H)  1R (KBr) 3414, 1624, 1595, 1518, 1473, 1360, 1294, 1170, 1144, 1120, 1104, 1016cm <sup>-1</sup>	δ 2.02 (8, 6H), 5 4, 1H), 7.04 - 7.1 24, 1595, 1518, 1	2.15 (s, 3H), 3 2 (m, 1H), 7.: 1473, 1360, 13	3.20 (s, 311), 5. 30 - 7.42 (m, 4 294, 1170, 114	14 (d, J = 3.9 H 11) 14, 1120, 1104,	z, 1H), 6.81 · 6. 1016cm <sup>-1</sup>	86 (m, 1H), 6.	.91 (d.d, J = 10.1	ચ
1-947	1H NMR (CDCh <sub>3</sub> ) δ 1.77 (8, 3H), 1.82 (8, 3H), 2.02 (8, 6H), 2.16 (8,3H), 3.20 (8, 3H), 4.64 (d, J = 6.6Hz, 2H), 5.53-5.61 (m, 1H), 6.82 - 7.09 (m, 4H), 7.33 (d, J = 9.0Hz, 2H), 7.39 (d, J = 9.0 Hz, 2H)  1R (KBr) 1514, 1468, 1376, 1294, 1262, 1175, 1162,992,968em <sup>-1</sup>	δ 1.77 (s, 3H), , 4H), 7.33 (d, J 38, 1376, 1294, 1	1.82 (s, 3H), = 9.0Hz, 2H) 1262, 1175, 1	2.02 (s, GH), 5 , 7.39 (d, J = 9 152,992,968cn	2.16 (8,3H), 3.20 0.0 Hz, 2H)	) (s, 3H), 4.64 (	d, J = 6.6Hz,	2H), 5.53-5.61 (r	-
1-948	1H NMR (CDC4.) 6 1.77 (a, 3H), 1.82 (a, 3H), 2.02 (a, 6H), 2.17 (a, 3H), 4.64 (d, J = 6.6Hz, 2H), 4.81 (a, 1H), 5.52 · 5.60 (m, 1H), 6.82-7.08 (m, 6H), 7.22 (d, J = 8.7Hz, 2H)  1R (KBr) 3568,3417, 1613, 1517, 1471, 1287, 1261, 1230, 1192, 1102, 1001cm <sup>-1</sup>	6 1.77 (a, 3H), 1 6H), 7.22 (.d, J = 7, 1613, 1517, 1-	1.82 (s, 311), 2 = 8.711z, 2H) 471, 1287, 12	2.02 (s, 6H), 2. (61, 1230, 119	17 (s, 3H), 4.64 2, 1132, 1102, 1	(d, J = 6.6Hz, 001cm <sup>-1</sup>	211), 4.81 (8, 1	(H), 6.52 · 6.60 (r	<u>-</u> T
1-949	<sup>1</sup> H NMR (CDCl <sub>3</sub> ) δ 3.02 (s, 6H), 3.46 (s, 3H), 3.75 (s, 3H), 5.18 (s, 2H), 6.03 (s, 1H), 6.47 (s, 1H), 6.82 (d, J = 8.7 Hz, 2H), 7.03 - 7.51 (m, 8H), 7.55 (d, J = 8.7 Hz, 2H)  11.03 - 7.51 (m, 8H), 7.55 (d, J = 8.7 Hz, 2H)  11.03 - 7.51 (m, 8H), 7.55 (d, J = 8.7 Hz, 2H)	δ 3.02 (s, GH), , 7.55 (.d, J = 8.7) )4, 1527, 1488, 1	3.46 (s, 3H), 7 Hz, 2H) 1359, 1267, 13	3.75 (s, 3H), 6 233, 1198, 111	0, 1070cm <sup>-1</sup>	3 (s, 1H), 6.47	(s, 1H), 6.82 (	d, J = 8.7 Hz, 2H	<del>.</del> T
1.950	<sup>1</sup> H NMR (CDCl <sub>3</sub> ) δ 2.60 (8, 3H), 3.03 (8, 6H), 3.54 (6, 3H), 3.76 (8, 3H), 5.21 (8, 2H), 6.80 (d, J = 8.7 Hz, 2H), 6.86 (8, 1H), 7.03 - 7.49 (m, 8H), 7.54 (.d, J = 8.7 Hz, 2H)  11 (KBr) 1602, 1530, 1483, 1444, 1395, 1366, 1233, 1179, 1078, 1016cm <sup>-1</sup>	δ 2.60 (s, 3H), 8H), 7.54 (.d, J) 30, 1483, 1444, 1	, 3.03 (s, 6H) = 8.7 Hz, 2H 1395, 1366, 12	), 3.54 (s, 3H) ) 233, 1179, 107	, 3.76 (s, 3H), 18, 1015cm <sup>-1</sup>	5.21 (8, 2H), 6.	80 (d, J = 8.1	7 Hz, 2H), 6.86 (	0
1.951	IH NMR (CDCl <sub>3</sub> ) δ 2.76 (a, 3H), 3.02 (a, 6H), 3.54 (a, 3H), 3.76 (a, 3H), 5.28 (a, 1H), 6.81 (d, J = 7.04 · 7.23 (m, 3H), 7.54 (d, J = 9.0Hz, 2H)  IR (KBr) 3375, 1607, 1530, 1483, 1395, 1346, 1292, 1228, 1163, 1077, 1009cm <sup>-1</sup>	δ 2.76 (s, 3H), ξ , 7.54 (d, J = 9.0 )7, 1530, 1483, 1	3.02 (s, 6H), ( )Hz, 2H) 1395, 1346, 13	3.54 (s, 3H), 3. 292, 1228, 116	76 (s, 3H), 5.26 13, 1077, 1009ca	(6, 1H), 6.81 (	1	9.0Hz, 2H), 6.86 (s, 1H),	<u> </u>
1-952	111 NMR (CDCl <sub>3</sub> )	δ 1.76 (8, 3H), 1, 6.82 (.d, J = 8.' 31, 1484, 1389, 1	1.80 (s, 3H), 7 Hz, 2H), 6.8 1369, 1268, 13	2.71 (e, 3H), 3 36 (e, 1H), 7.0 235, 1197, 117	.02 (s, 6H), 3.5 1 - 7.23 (m, 3H) 76, 1084cm <sup>1</sup>	5 (s, 3H), 3.76 (	(e, 3H), 4.63 ( 7 Hz, 2H)	d, J = 6.9 Hz, 2F	<u></u>

Table 188

		1H NMR (CDCl3) $\delta$ 1.76 (s, 3H), 1.80 (s, 3H), 3.02 (s, 6H), 3.47 (s, 3H), 3.75 (s, 3H), 4.63 (d, J = 6.9 Hz, 2H), 5.51 - 5.60 (m,
<u>=</u>	1.953	11I), 6.03 (s, 11I), 6.47 (s, 11I), 6.82 (d, J = 8.7 Hz, 21I), 6.99 · 7.08 (m, 11I), 7.16 · 7.29 (m, 21I), 7.55 (d, J = 8.7 Hz, 2H)
		JR (KBr) 3498, 1604, 1528, 1488, 1360, 1266, 1234, 1198, 1110, 1067cm <sup>-1</sup>
		111 NMR (CDCl <sub>3</sub> ) \$ 3.02 (8, 6H), 3.47 (8, 3H), 3.75 (8, 3H), 5.14 (6, 1H), 6.03 (8, 1H), 6.47 (6, 1H), 6.82 (d, J = 9.0Hz, 2H),
- S:	1.954	$7.02 \cdot 7.09$ (m, 1H), $7.15 \cdot 7.29$ (m, 2H), $7.55$ (d, $J = 9.0$ Hz, 2H)
		IR (KBr) 3492,3383, 1607, 1629, 1488, 1397, 1223, 1103, 1065, 1006cm <sup>-1</sup>
		111 NMR (CDCl <sub>3</sub> ) 8 2.01 (s, 6H), 2.17 (s, 3H), 4.75 (s, 1H), 6.19 (s, 2H), 6.83 - 7.15(m, 7H), 7.30 - 7.53 (m, 6H)
<u>:</u> —	1-955	IR (KBr) 3542, 1607, 1579, 1513, 1469, 1263, 1126, 1107, 1015cm <sup>-1</sup>
		H NMR (CDCl <sub>3</sub> ) $\delta$ 1.76 (8, 3H), 1.82 (8, 3H), 2.66 (8, 3H), 3.50 (8, 3H), 3.77 (8, 3H), 4.62 (d, $J = 6.4$ Hz, 2H), 5.48 · 5.56 (m,
		111), 5.71 (8, 111), 5.81 (8, 111), 5.47 (8, 111), 6.90 - 7.00 (m, 211), 7.04 (d, J = 1.8 Hz, 111), 7.42 (.d, J = 7.8 Hz, 211), 7.82 (d.d, J
<u>≃</u>	1-926	= 7.8 & 1.8 Hz, 1 H), 8.26(.d. J = 1.5 Hz, 1 H)
		IR (KBr) 3520,3419, 1585, 1529, 1506, 1344, 1313, 1290, 1251, 1226, 1118, 1079cm <sup>-1</sup>
		mp 123.126 C
		11 NMR (CDCL <sub>3</sub> ) $\delta$ 1.75 (a, 311), 1.78 (d, J = 0.9 Hz, 311), 3.47 (s, 311), 3.75 (e, 3H), 3.87 (s, 3H), 3.88 (s, 3H), 4.63 (d, J = 6.6
<u> </u>	1.957	Hz, 2H), 5.57 (m, 1H), 5.92 (s, 1H), 6.47 (s, 1H), 6.95.7.40 (m, 5H), 7.56.7.62 (m, 2H)
		IR (CHCl <sub>3</sub> ) 3510, 2934, 1608, 1519, 1489, 1461, 1394, 1285, 1243, 1175, 1115, 1075, 1034, 1008, 926, 823 cm <sup>-1</sup>
		mp 163-164 °C
•		1H NMR (CDCl3) & 1.75 (8, 3H), 1.78 (8, 3H), 3.61 (8, 3H), 3.65 (8, 3H), 3.75 (8, 3H), 3.88 (8, 3H), 4.64 (d, J = 6.6 Hz, 2H),
<b>≍</b> ——	1.958	4.99 (s, 1H), 5.58 (m, 1H), 6.68 (s, 1H), 6.88-6.98 (m, 5H), 7.46-7.52 (m, 2H)
		IR (CHCl <sub>3</sub> ) 3592, 2934, 1610, 1517, 1461, 1387, 1237, 1171, 1136, 1111, 1084, 1036, 1012, 830 cm <sup>-1</sup>

Table 189

1-959	mp 142-146 °C 111 NMR (CDCh) & 1.76 (s, 3H), 1.82 (s, 3H), 3.47 (s, 3H), 3.75 (s, 3H), 3.94 (s, 3H), 4.61 (d, J = 6.6 Hz, 2H), 5.53 (m, 1H), 5.70 (s, 1H), 5.91 (s, 1H), 6.46 (s, 1H), 6.94-7.26 (m, 6H)  118 (CHCh) 3526 2930, 1585, 1520, 1489, 1460, 1399, 1287, 1260, 1110, 1070, 1010, 819 cm <sup>-1</sup>
096-1	mp 141-145 °C  "H NMR (CDCL <sub>3</sub> )
1.96.1	mp 152-154 °C <sup>1</sup> H NMR (CDCl <sub>3</sub> ) δ 2.26 (s, 3H), 4.79 (br, 1H), 5.19 (s, 2H), 6.87-6.90 (m, 2H), 7.03-7.15 (m, 4H), 7.22-7.26 (m, 2H), 7.34-7.50 (m, 6H) <sup>1</sup> H (CHCl <sub>3</sub> ) 3596, 2925, 2869, 1612, 1581, 1523, 1490, 1465, 1383, 1313, 1298, 1259, 1171, 1125, 1100, 1012, 956, 877, 836 cm <sup>-1</sup>
I-962	mp 150-151 °C; <sup>1</sup> H NMR (CDCl <sub>3</sub> ) δ 2.28 (s, 3H), 3.90 (s, 3H), 4.77-4.79 (d, J = 6.0 Hz, 2H), 6.26 (d, J = 6.0 Hz, 1H), 6.88-6.91 (m, 5H),  7.13-7.14 (d, J = 2.7 Hz, 2H), 7.24-7.27 (m, 2H)  IR (CHCl <sub>3</sub> ) 3596, 2958, 1732, 1612, 1587, 1622, 1490, 1464, 1325, 1267, 1172, 1139, 1100, 1032, 886, 835 cm <sup>-1</sup>
1-963	mp 93-94 °C  1H NMR (CDCl <sub>3</sub> ) δ 2.27 (s, 3H), 4.76-4.79 (d, J = 6.0 Hz, 2H), 5.12 (br, 1H), 6.24 (t, J = 6.0 Hz, 1H), 6.88-7.15 (m, 7H),  7.22-7.26 (m, 2H)  IR (CHCl <sub>3</sub> ) 3596, 2925, 2867, 1613, 1583, 1523, 1490, 1468, 1424, 1388, 1258, 1171, 1126, 1100, 1022, 956, 886, 836 cm <sup>-1</sup>
	111 (CRICIS) 3030, 4343, 4561, 1013, 1053, 1053, 1430, 1456, 1444, 1366, 1456, 1111, 1146, 1100, 1044, 306, 669, 63

Table 190

3	foam 111 NMR (CHCHA) & 3.47 (8, 311), 3.74 (8, 311), 5.06 (8, 111), 5.15 (8, 211), 5.70 (8, 111), 6.94 (8, 111), 6.46 (8, 111), 6.81-7.50 (m,
1-9G-1	12H) IR (CHCh <sub>a</sub> ) 3534, 1609, 1687, 1518, 1504, 1482, 1463, 1465, 1407, 1322, 1290, 1249, 1200, 1112, 1072, 1011 cm <sup>-1</sup>
	form III NMR (CDCl.,) & 3.61 (s, 311), 3.75 (s, 311), 5.16 (s, 211), 5.72 (s, 211), 6.46 (s, 111), 6.83 (s, 111), 6.94 (dd, J = 2.0, 8.4 Hz,
1-965	1H), 7.00-7.12 (m, 4H), 7.29-7.50 (m, 7H) IR (CHCL <sub>3</sub> ) 3531, 1587, 1516, 1498, 1482, 1462, 1455, 1410, 1362, 1308, 1288, 1248, 1202, 1121, 1092, 1070, 1006 cm <sup>-1</sup>
	mp 174·175 ℃ III NMR (CDCL <sub>3</sub> ) δ 2.28 (s, 3H), 3.38 (s, 3H), 3.71 (s, 3H), 5.16 (s, 2H), 5.68 (s, 1H), 5.88 (s, 1H), 6.30 (s, 1H), 6.98 (dd, J=
996-1	1.8, 8.4 Hz, 1H), 7.04 (d, J = 8.4 Hz, 1H), 7.11 (d, J = 1.8 Hz, 1H), 7.22-7.49 (m, 9H) IR (KBr) 3516, 3398, 1587, 1516, 1500, 1484, 1453, 1412, 1306, 1285, 1247, 1231, 1202, 1126, 1101, 1072, 1019, 769, 737
	cm <sup>-1</sup>
1-967	mp 103-104 °C 'H. NMR (CDCl <sub>3</sub> ) & 2.26 (8, 6H), 4.61-4.78 (m, 3H), 4.84 (8, 1H), 6.84-6.92 (m, 2H), 6.97-7.16 (m, 5H), 7.21-7.27 (m, 2H)
	IR (KBr) 3409, 1742, 1523, 1489, 1315, 1295, 1259, 1231, 1206, 1193, 1124, 1001, 834, 815 cm <sup>-1</sup>
	mp 90-91 °C
	<sup>1</sup> H NMR (CDCI <sub>3</sub> ) $\delta$ 1.77 (8, 6H), 1.82 (d, $J = 0.9$ Hz, 6H), 2.27 (8, 6H), 4.56 (d, $J = 6.6$ Hz, 2H), 5.13 (d, $J = 6.6$ Hz, 2H),
806-1	5.49.5.60 (m, 2H), 6.94.7.00 (m, 2H), 7.01.7.14 (m, 5H), 7.25-7.31 (m, 2H)
	IR (KBr) 1608, 1522, 1488, 1378, 1299, 1288, 1273, 1259, 1242, 1196, 1176, 1014, 831, 811, 776 cm <sup>-1</sup>

Table 191

50	45	40	35	30	<b>25</b>	20	15 .	10	5
696-1	mp 200-203 °C 111 NMR (CDCL <sub>3</sub> )	δ 2.00 (s, 3H 6.86-6.90 (m, 2	), 2.25 (s, 31l), 21l), 7.04-7.14 1. 1523, 1489,	3.46 (s, 3H), (m, 3H), 7.47 1398, 1264, 1	3.73 (s, 3H), 3 .7.52 (m, 2H)	.83 (s, 311), 5.5	25 (a, 1H), 6.0 823, 530 cm. <sup>1</sup>	1-6.03 (m, 1H), 6	.06 (s,
0.6-1	mp 157-160 °C 111 NMR (CDCl <sub>3</sub> )	δ 1.74 (s, 3H , 5.82 (s, 1H), θ 34, 1611, 15 <u>2</u> 3	), 1.80 (s, 3H) 5.46 (s, 1H), 6. 5, 1490, 1397.	. 2.86 (s, 3H), 66 (d, J = 2.1	. 3.49 (s, 3H), Hz, 1H), 6.73 112, 1074, 100	3.75 (s, 3H), 4 (dd, J = 2.1, 8	.57 (d, J = 6.6	0°C. (CDCs.) & 1.74 (s. 3H), 1.80 (s. 3H), 2.86 (s. 3H), 3.49 (s. 3H), 3.75 (s. 3H), 4.57 (d. J = 6.6 Hz, 2H), 5.08 (s. 1H), m. 1H), 5.82 (s. 1H), 6.46 (s. 1H), 6.66 (d. J = 2.1 Hz, 1H), 6.73 (dd. J = 2.1, 8.1 Hz, 1H), 6.86-6.94 (m. 3H), 7.50-4) (4) (5) (6) (7) (8) (8) (9) (9) (9) (9) (9) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1	, 1H). 7.60.
1.971	mp 153-155 °C.  111 NMR (CDCha) & 1.77 (s, 3H), 1.82 (s, 3H), 2.10 (s, 3H), 3.20 (s, 3H), 3.21 (s, 3H), 3.36 (s, 3H), 3.71 (s, 3H), 4.63 (d, J = 6.9 Hz, 2H), 5.52 (t, J = 6.9 Hz, 1H), 7.06 (d, J = 8.4 Hz, 1H), 7.14 (dd, J = 8.4, 2.1 Hz, 1H), 7.23 (d, J = 2.1 Hz, 1H), 7.36 (d, J = 8.9 Hz, 2H), 7.69 (d, J = 8.9 Hz, 2H)  111, 7.36 (d, J = 8.9 Hz, 2H), 7.69 (d, J = 8.9 Hz, 2H)  112, 1136 (d, J = 8.9 Hz, 2H), 7.69 (d, J = 8.9 Hz, 2H)	5 °C CDCla) δ 1.77 (8, 3H), 1.82 (8, 3H), 2.10 (8, 3H), 3.20 (8, 3H), 5.52 (t, J = 6.9 Hz, 1H), 6.73 (8, 1H), 7.06 (d, J = 8.4 Hz, 1H, J = 8.9 Hz, 2H) (d, J = 8.9 Hz, 2H), 7.69 (d, J = 8.9 Hz, 2H) 516, 1474, 1365, 1229, 1175, 1161, 1096, 973, 870, 810 cm <sup>-1</sup>	), 1.82 (s, 3H) 1H), 6.73 (s, 1] fg (d, J = 8.9 H	, 2.10 (s, 3H), H), 7.06 (d, J [z, 2H)	. 3.20 (s, 3H), = 8.4 Hz, 1H), 0, 810 cm <sup>-1</sup>	3.21 (s, 3H), 3	8.4, 2.1 Hz, 1	71 (s, 3H), 4.63 (H), 7.23 (d, J = 2	d, J =
1-972	amorphous <sup>1</sup> H NMR (CDCl <sub>3</sub> ) & 1.77 (s, 3H), 1.82 (s, 3H), 2.43 (s, 3H), 3.44 (s, 3H), 3.71 (s, 3H), 4.49 (d, J = 9.9 Hz, 2H), 4.62 (d, J = 6.6 Hz, 2H), 4.72 (d, J = 7.2 Hz, 2H), 7.21 · 7.30 (m, 4H), 7.54 (d, J = 8.1 Hz, 2H)  8.1 Hz, 2H)  IR (KBr) 3599, 1463, 1386, 1081, 1007 cm <sup>-1</sup>	6 1.77 (e, 3H 1=7.2 Hz, 2H), 63, 1386, 1081	), 1.82 (s, 3H), , 5.53 (t, J = 6.	2.43 (s, 3H), 6 Hz, 1H), 6.5	3.44 (s, 3H), 3 16 (s, 1H), 6.96	.71 (s, 3H), 4.4 3 (d, J = 8.7 Hz	19 (d, J = 9.9 F	lz, 2H), 4.62 (d, J 30 (m, 4H), 7.54 (	= 6.6 d, J =

Table 192

1.973	mp 83-86 °C 111 NMR (DMSO-d <sub>6</sub> ) \$\partial 1.77 (8, 3H), 1.77 (8, 3H), 3.36 (8, 3H), 4.23 (d, J = 23.1 Hz, 2H), 4.48 (t, J = 4.4 Hz, 1H), 4.52 (d, J = 5.4 Hz, 2H), 4.62-4.60 (m, 4H), 4.89 (t, J = 5.6 Hz, 1H), 5.22 (t, J = 5.9 Hz, 1H), 5.48 (t, J = 6.6 Hz, 1H), 6.92 (g, J = 8.6 Hz, 1H), 7.12 (dd, J = 8.6, 1.5 Hz, 1H), 7.26 (d, J = 1.5 Hz, 1H), 7.42 (d, J = 8.0 Hz, 2H), 7.61 (d, J = 8.0 Hz, 2H)
	IR (KBr) 3399, 1464, 1386, 1230, 1005 cm 1
1.974	mp 177-179 °C 11 NMR (CDCl <sub>3</sub> )  \$\beta\$ 1.31 (d, J = 6.9 Hz, 6H), 2.70 (s, 3H), 2.98 (sept, J = 6.9 Hz, 1H), 3.12 (s, 3H), 3.54 (s, 3H), 3.76 (s, 3H), 5.19 (s, 2H), 6.87 (s, 1H), 7.15 (d, J = 8.4 Hz, 1H), 7.30-7.49 (m, 9H), 7.54 (d, J = 7.8 Hz, 2H)
	IR (KBr) 1512, 1480, 1369, 1176, 1084, 1014, 813, 798 cm <sup>-1</sup>
1.975	mp 180-182 °C  1H NMR (CDCl.)
1.976	

Table 193

The transfer of the control of the c	
1H NMR (CDCh) & 2.68 (s, 3H), 3.13 (s, 3H), 3.20 (s, 3H), 3.57 (s, 3H), 3.79 (s, 3H), 0.19 (s, 2H), 0.00 (s, 1H), 7.10 (u, 9 – 8.7 Hz, 1H), 7.31-7.62 (m, 1HH) 1R (CHCh) 1517, 1475, 1371, 1227, 1219, 1176, 1117, 1081, 968, 925, 856, 821 cm <sup>-1</sup>	
foam 1H NMR (CDCl <sub>3</sub> ) & 2.65 (9, 3H), 2.94 (8, 3H), 3.14 (9, 3H), 3.59 (8, 3H), 3.76 (9, 3H), 5.19 (9, 2H), 6.86 (9, 1H), 7.16 (d, J = 8.7 Hz, 1H), 7.33-7.57 (m, 11H) 1R (CHCl <sub>3</sub> ) 15.17, 1477, 1398, 1370, 1268, 1233, 1216, 1177, 1159, 1079, 972, 894, 856, 818 cm <sup>-1</sup>	
77 (s, 3H), 1.81 (s, 3H), 2.69 (s, 3H), 2.94 (s, 3H), 3.25 (s, 3H), 3.60 (s, 3H), 3.76 (s, 3H), 4.64 (d, J = 3), 6.86 (s, 1H), 7.10 (d, J = 8.4 Hz, 1H), 7.34-7.57 (m, 11H) 1398, 1369, 1234, 1178, 1159, 1105, 1079, 972, 895, 854, 814, 801 cm <sup>-1</sup>	
76 (d, J = 0.9 Hz, 3H), 1.81 (d, J = 0.9 Hz, 3H), 2.71 (s, 3H), 3.20 (s, 3H), 3.24 (s, 3H), 3.57 (s, 3H), 6.6 Hz, 2H), 5.49 (m, 1H), 6.86 (s, 1H), 7.09 (d, J = 8.7 Hz, 1H), 7.31-7.40 (m, 3H), 7.48-7.55 (m, 3H) 1365, 1269, 1236, 1177, 1140, 1116, 1078, 964, 923, 854, 814 cm <sup>-1</sup>	
77 (s, 3H), 1.82 (d, J = 0.4 Hz, 3H), 3.62 (s, 3H), 3.75 (s, 3H), 4.63 (d, J = 6.6 Hz, 2H), 5.53 (m, 1H), 6.46 (s, 1H), 6.86 (s, 1H), 6.89-7.13 (m, 4H), 7.29-7.46 (m, 3H) 96, 1482, 1462, 1449, 1408, 1371, 1313, 1290, 1245, 1210, 1126, 1093, 1073, 1001, 783, 770 cm <sup>-1</sup>	
H H H H H H H H H H H H H H H H H H H	H NMR (CDCl <sub>3</sub> ) & 1.77 (s, 3H), 1.81 (s, 3H), 2.69 (s, 3H), 3.25 (s, 3H), 3.25 (s, 3H), 3.60 (s, 3H), 3.76 (s, 3H), 4.64 (d, J = 6.9 Hz, 2H), 5.50 (m, 1H), 6.86 (s, 1H), 7.10 (d, J = 8.4 Hz, 1H), 7.34-7.57 (m, 11H)  IR (CHCl <sub>3</sub> ) 1517, 1476, 1398, 1369, 1234, 1178, 1159, 1105, 1079, 972, 895, 854, 814, 801 cm <sup>-1</sup> foam  II NMR (CDCl <sub>3</sub> ) & 1.76 (d, J = 0.9 Hz, 3H), 1.81 (d, J = 0.9 Hz, 3H), 2.71 (s, 3H), 3.20 (s, 3H), 3.24 (s, 3H), 3.57 (s, 3H), 3.79 (s, 3H), 4.64 (d, J = 6.6 Hz, 2H), 5.49 (m, 1H), 6.86 (s, 1H), 7.09 (d, J = 8.7 Hz, 1H), 7.31-7.40 (m, 3H), 7.48-7.56 (m, 3H)  IR (CHCl <sub>3</sub> ) 1517, 1474, 1365, 1269, 1236, 1177, 1140, 1116, 1078, 964, 923, 854, 814 cm <sup>-1</sup> mp 122-123 C  IH NMR (CDCl <sub>3</sub> ) & 1.77 (s, 3H), 1.82 (d, J = 0.4 Hz, 3H), 3.62 (s, 3H), 3.75 (s, 3H), 4.63 (d, J = 6.6 Hz, 2H), 5.53 (m, 1H), 5.70 (s, 1H), 6.73 (s, 1H), 6.86 (s, 1H), 6.89-7.13 (m, 4H), 7.29-7.46 (m, 3H)  IR (KBr) 3366, 1587, 1496, 1462, 1462, 1449, 1408, 1371, 1313, 1290, 1245, 1210, 1126, 1093, 1073, 1001, 783, 770 cm <sup>-1</sup>

Table 194

	np 171-172 °C: H NMR (CDCL <sub>3</sub> ) δ 1.76 (s, 3H), 1.82 (s, 3H), 3.48 (s, 3H), 3.74 (s, 3H), 4.61 (d, J = 6.9 Hz, 2H), 4.91 (s, 1H), 5.63 (m, 1H), 5.91 (s, 1H), 6.46 (s, 1H), 6.86 (m, 1H), 6.91-7.02 (m, 2H), 7.06 (m, 1H), 7.13 (m, 1H), 7.21 (m, 1H), 7.32 (m, 1H)
	(в. 3H), 1.82 (в. 3H), 3.48 (в. 3H), 3.74 (в. 3H), 4.61 (d. J = 6.9 Hz, 2H), 4.91 (в. 1H), 5.53 (m. 1H), 6.46 (в. 1H), 6.86 (m. 1H), 6.91-7.02 (m. 2H), 7.06 (m. 1H), 7.13 (m. 1H), 7.21 (m. 1H), 7.32 (m.
	6.46 (s, 1H), 6.86 (m, 1H), 6.91-7.02 (m, 2H), 7.06 (m, 1H), 7.13 (m, 1H), 7.21 (m, 1H), 7.32 (m,
	IR (KBr) 3368, 1585, 1519, 1507, 1484, 1460, 1460, 1403, 1204, 1265, 1237, 1206, 1110, 1072, 1006, 789, 766 cm
HE, 1H), 5.7  IR (CHCE <sub>3</sub> )  HE NMR (C 8H)  IR (CHCE <sub>3</sub> )  IR (CHCE <sub>3</sub> )	111 NMR (CUCI.) $\delta$ 1.77 (8, 3H), 1.83 (d, $J$ = 0.9 Hz, 3H), 2.26 (8, 3H), 2.27 (8, 3H), 4.63 (d, $J$ = 6.9 Hz, 2H), 5.13 (d, $J$ = 3.9
IR (CHCIA) mp 89-95 % H NMR (C 8H) IR (CHCIA) mp 74-75 % H NMR (C 7.68 (m, 2H) IR (CHCIA) cm. mp 50-62 %	8-7.14 (m, 811)
mp 89-95 † 11 NMR (C 8H) 11 (CHCla) mp 74-75 † 11 NMR (C 7.68 (m, 2H) 11R (CHCla) cm † mp 50-62 †	JR (CHCh) 3578, 2922, 1618, 1522, 1490, 1383, 1282, 1120, 979, 873, 824 cm. <sup>1</sup>
111 (CHCls.)  IR (CHCls.)  IR (CHCls.)  IH NMR (C 7.68 (m, 2H  IR (CHCls.)  Cm. I  mp 50-62 **	
8H) IR (CHCla) mp 74-75 % 'H NMR (C 7.68 (m, 2H) IR (CHCla) cm.¹ mp 50-62 %	H NMR (CDCl <sub>3</sub> ) $\delta$ 1.77 (8, 6H), 1.81 (d, $J = 0.9$ Hz, 6H), 2.27 (8, 6H), 4.63 (d, $J = 6.6$ Hz, 4H), 5.55 (m, 2H), 6.98-7.14 (m,
IR (CHCla) mp 74-75 ¹ iH NMR (C 7.68 (m, 2H) IR (CHCla) cm¹ mp 50-62 ¹ iH NMR (C	
mp 74.75 <sup>†</sup> 1H NMR (C 7.68 (m, 2H IR (CHCl <sub>3</sub> ) cm. <sup>†</sup> mp 50-62 <sup>†</sup> 1H NMR (C	29:00, 1676, 1620, 1490, 1382, 1296, 1270, 1127, 987, 874 cm <sup>-1</sup>
14 NMR (C 7.68 (m, 2H) 1R (CHCla) cm. <sup>1</sup> mp 50-62 <sup>1</sup>	
7.68 (m, 2II IR (CHCla) cm.1 mp 50-52 %	1H NMR (CDCl <sub>3</sub> ) & 2.16 (8, 3H), 2.69 (8, 3H), 3.14 (8, 3H), 3.20 (8, 3H), 3.56 (8, 3H), 5.20 (8, 2H), 7.16-7.49 (m, 11H), 7.65-
IR (CHCl <sub>3</sub> ) cm. <sup>1</sup> mp 50-52 <sup>3</sup> III NMR (C	
	2939, 1732, 1613, 1618, 1478, 1464, 1416, 1371, 1331, 1292, 1268, 1176, 1160, 1118, 1088, 1010, 969, 960, 872
	111 NMR (CDCI) 5-1.77 (8, 3H), 1.82 (8, 3H), 2.16 (8, 3H), 2.74 (8, 3H), 3.20 (8, 3H), 3.24 (8, 3H), 3.57 (8, 3H), 4.64-4.66 (d,
$\begin{bmatrix} 1.980 \\ J = 6.3 \text{ Hz, 2H} \end{bmatrix}$ , 5.50 (m, 1H), 7.10	2H), 5.50 (m, 1H), 7.10-7.39 (m, 6H), 7.66-7.68 (m, 2H)
IR (CHCl <sub>3</sub> ) 2938, 1613, 1518, 147	2938, 1613, 1518, 1477, 1370, 1331, 1290, 1267, 1176, 1150, 1117, 1088, 970, 949, 871 cm.'

Table 195

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1.987	1H NMR (CDCls) & 1.59-1.60 (d, J = 0.6 Hz, 3H), 1.70-1.71 (d, J = 0.9 Hz, 3H), 2.26(e, 3H), 2.28 (e, 3H), 2.36 (m, 1H), 2.77
	(m, 111), 3.20 (s, 311), 3.23 (s, 311), 5.24 (m, 111), 7.12 (s, 111), 7.15 (s, 111), 7.23-7.26 (m, 114), 7.33-7.42 (m, 517)
	inp 159-161 °C
	<sup>1</sup> H NMR (CDCl <sub>3</sub> ) $\delta$ 1.76 (8, 3H), 1.82 (8, 3H), 2.12 (8, 3H), 3.48 (8, 3H), 4.61-4.64 (d, $J = 6.6$ Hz, 2H), 4.75 (br, 1H), 5.54 (m, $J = 6.6$ Hz, $J = $
1.988	1H), 5.69 (s, 1H), 5.73 (s, 1H), 6.77-6.98 (m, 6H), 7.51-7.54 (m, 2H)
	IR (CHCh.) 3595, 3529, 2937, 1613, 15787, 1522, 1489, 1455, 1401, 1310, 1289, 1173, 1127, 1095, 1009, 939, 835 cm.
	mp 126-128 °C
	1H NMR (CDCl <sub>3</sub> ) & 2.25 (s, 3H), 3.78 (s, 3H), 5.16 (s, 2H), 5.75 (br, 1H), 6.83·6.89 (m, 4H), 6.98·7.00 (m, 2H), 7.17 (s, 1H),
1.989	7.40-7.47 (m, 7H)
	IR (CHCl <sub>3</sub> ) 3596, 3543, 2937, 1610, 1588, 1523, 1493, 1465, 1465, 1388, 1328, 1315, 1262, 1173, 1126, 1038, 1012, 835 cm
	mp 87-90 °C
	1H NMR (CDCl <sub>3</sub> ) & 1.59-1.60 (d, J = 0.6 Hz, 3H), 1.72-1.73 (d, J = 0.9 Hz, 3H), 2.26 (s, 3H), 2.28 (s, 3H), 2.34-2.37 (m, 2H),
1.990	2.66-2.71 (m, 2H), 4.84-4.86 (br, 2H), 5.28 (m, 1H), 6.79 (d, J = 1.5 Hz, 1H), 6.86-6.89 (m, 3H), 7.11-7.17 (m, 3H), 7.23-7.26
	(m, 2H)
	IR (CHCl <sub>2</sub> ) 3598, 2925, 2859, 1612, 1569, 1621, 1488, 1450, 1425, 1414, 1328, 1257, 1171, 1101, 958, 836 cm <sup>-1</sup>
	mp 174-176 °C
	1H NMR (CDCl <sub>3</sub> ) 6 2.26 (8, 3H), 3.13 (8, 3H), 3.18 (8, 3H), 3.80 (8, 3H), 5.19 (8, 2H), 6.84 (8, 1H), 7.13 (d, J = 8.4 Hz, 1H),
1.991	7.18 (s, 1H), 7.28-7.50 (m, 9H), 7.59-7.62 (m, 2H)
	IR (CHCls) 2940, 1732, 1613, 1520, 1490, 1465, 1465, 1415, 1371, 1331, 1291, 1260, 1173, 1149, 1111, 1038, 1018, 1003,
	971, 872, 813 cm <sup>-1</sup>

Table 196

	mp 135-137 °C 111 NMR (CDCM) & 1.77-1.78 (d, J = 0.9 Hz, 3H), 1.82-1.83 (d, J = 0.6 Hz, 3H), 2.26 (s, 3H), 3.18 (s, 3H), 3.24 (s, 3H), 3.80 1. 211, 4.64 (d. 1 = 6.6 Hz, 2H), 5.52 (m. 1H), 6.84 (s. 1H), 7.07 (d, J = 8.7 Hz, 1H), 7.18 (s, 1H), 7.25-7.35 (m, 4H), 7.59-7.62
1.992	(8, 311), 4.04 (4, 0 = 0.0 112, 211), 0.02 (111, 111), 0.01 (4, 111), 0.01 (111) (111)
	IR (CHCl.) 3596, 3539, 2937, 1610, 1587, 1523, 1492, 1464, 1454, 1388, 1328, 1316, 1292, 1261, 1173, 1126, 1038, 996, 834
	cn)-1 mn 131-133 C
	III NMR (CDCh.) 6 1.77 (s, 3H), 1.83 (s, 3H), 2.26 (s, 3H), 3.78 (s, 3H), 4.61-4.64 (d, J = 6.9 Hz, 2H), 5.17 (br, 1H), 5.35 (m,
1.993	111), 5.78 (hr. 111), 6.83-6.99 (m, 611), 7.17 (s, 111), 7.44-7.47 (m, 2H)
	IR (CHCL) 3596, 3539, 2937, 1610, 1687, 1523, 1492, 1464, 1454, 1388, 1328, 131, 1292, 1261, 1173, 1126, 1038, 996, 834
	Cin. 1
	mp 127-130 °C
3	111 NMR (CDC) <sub>3</sub> ) 6 1.73 (d, J = 0.9 Hz, 3H), 1.76 (d, J = 0.9 Hz, 3H), 2.99 (e, 6H), 3.73-3.76 (m, 2H), 3.78 (e, 6H), 3.88 (e,
1.994	311), 5.37-5.40 (m, 1H), 5.83 (d, J = 7.8 Hz, 11f), 6.78-6.84 (m, 2H), 6.95 (s, 1H), 6.96 (s, 1H), 7.06-7.12 (m, 2H), 7.48-7.53 (m,
	2H)
	mp91-93 °C
	III NMR (CDCl <sub>3</sub> ) $\delta$ 1.78 (e, 311), 1.84 (e, 311), 2.02 (e, 6H), 4.63 (d, $J = 6.4 \text{ Hz}$ , 2H), 6.07 (e, 1H), 6.15 (e, 1H), 5.65 (t, $J = 7.0$
1.995	Hz, 1H), 6.63 (dd, J = 2.0, 8.2 Hz, 1H), 6.77 (d, J = 2.0 Hz, 1H), 6.93-6.99 (m, 4H), 7.39 (d, J = 8.6 Hz, 2H)
	IR(KBr) 3423, 2921, 1611, 1518, 1474, 1282, 1244, 1205, 1125, 1089, 995, 837, 815, 785 cm <sup>-1</sup>
	mp185-186 ℃
000	1H NMR (CDCts) & 1.32 (t, J = 7.5 Hz, 3H), 2.71 (q, J = 7.5 Hz, 2H), 3.46 (s, 3H), 3.76 (s, 3H), 6.16 (s, 2H), 6.69 (s, 1H),
066-1	5.89 (g, 1H), 6.94-7.08 (m, 3H), 7.37-7.46 (m, 5H), 7.54-7.59 (m, 2H), 7.82 (brs, 1H), 7.93 (d, J = 8.1 Hz, 1H)
	IR(KBr) 3504, 3269, 2968, 2936, 1708, 1532, 1518, 1487, 1311, 1286, 1193, 1121, 1071, 1014 cm <sup>-1</sup>

Table 197

50	45	40	35	30	25	20	15	10	5
1.997	mp77.78 °C (11), 0. 1.73 (s, 311), 1.77 (s, 311), 1.82 (s, 311), 3.70 (s, 311), 3.25 (s, 311), 3.55 (s, 311), 3.82 (s, 311), 4.65 (d, J = 11 NMR (CDCh <sub>3</sub> ) 0. 1.73 (s, 311), 1.77 (s, 311), 1.82 (s, 311), 2.70 (s, 311), 3.25 (s, 311), 6.87 (s, 111), 7.10 (d, J = 8.4 Hz, 114), 7.28 (d, J = 7.5 Hz, 211), 7.97 (d, J = 8.1 Hz, 111), 7.99 (s. 111)  17.28-7.39 (m, 311), 7.87 (d, J = 8.1 Hz, 111), 7.99 (s. 111)  18(KBr) 3431, 2939, 1702, 1518, 1483, 1368, 1308, 1204, 1177, 1121, 1092, 1079, 957, 804 cm <sup>-1</sup>	mp77-78 °C 111 NMR (CDCh <sub>3</sub> ) \$ 1.73 (a, 311), 1.77 (a, 311), 1.82 (a, 311), 2.70 (a, 311), 3.25 (a, 3H), 3.55 (a, 3H), 3.82 (a, 3H), 4.65 (d, J = 6.9 Hz, 2H), 4.94 (d, J = 7.5 Hz, 2H), 5.31 (t, J = 8.7 Hz, 1H), 5.50 (t, J = 6.6 Hz, 1H), 6.87 (a, 1H), 7.10 (d, J = 8.4 Hz, 1H), 7.28-7.39 (m, 3H), 7.87 (d, J = 8.1 Hz, 1H), 7.99 (a, 1H)  118(KBr) 3431, 2939, 1702, 1518, 1483, 1368, 1308, 1204, 1177, 1121, 1092, 1079, 957, 804 cm <sup>-1</sup>	2H), 5.31 (t, JH), 1.47, (s, JH), 1.99, 1.98, 1368, 13	1.82 (s, 311), 2 = 8.7 11z, 1H), 9 (s, 111) 308, 1204, 1177	.70 (s, 311), 3.25 5.50 (t, J = 6.6 7, 1121, 1092, 10	(e, 3H), 3.55 ( Hz, 1H), 6.87 ( 379, 967, 804 o	(s, 1H), 7.10 (d)	, 3H), 4.65 (d, J	" - T
866-1	mp144-146 °C 111 NMR (CDCl <sub>3</sub> ) Hz, 111), 6.66 (brs 7.31-7.37 (m, 1H) IR(KBr) 3476, 293	mp144-145 °C.  111 NMR (CDCh.) & 1.76 (s, 311), 1.82 (s, 311), 3.48 (s, 311), 3.69 (s, 311), 3.80 (s, 6H), 4.61 (d, J = 6.9 Hz, 2H), 5.51 (t, J = 4.8 Hz, 111), 5.66 (brs, 1H), 5.76 (brs, 1H), 6.30 (s, 1H), 6.69 (d, J = 8.1 Hz, 2H), 6.93-7.01 (m, 2H), 7.11 (d, J = 2.1 Hz, 1H), 7.31-7.37 (m, 1H)  7.31-7.37 (m, 1H)  IR(KBr) 3476, 2936, 1589, 1517, 1500, 1472, 1408, 1288, 1249, 1111 cm <sup>-1</sup>	s, 1.82 (s, 3H), s, 1H), 6.30 (s	3.48 (s, 3H), 3.0 s, 1H), 6.69 (d, 408, 1248	69 (e, 311), 3.80 (d)	(a, GH), 4.61 (d	, J = 6.9 Hz, 2l	H), 6.61 (t, J = 4.	<b>6</b> 1
666-1	mp82-83 °C 1H NMR (CDCl <sub>3</sub> , 6.19 (s, 2H), 6.69 IR(KR <sub>1</sub> ) 3434, 29	mp82-83 °C <sup>1</sup> H NMR (CDCl <sub>3</sub> )	), 3.15 (s, 3H), 17 (m, 1H), 7.3 1581, 1508, 1	3.48 (s, 3H), 3. 36-7.49 (m, 8H) 463, 1396, 1368	56 (e, 3H), 3.72 5, 1294, 1272, 13	(s, 3H), 3.80 (o	8, 6H), 4.66 (s, 2, 1078, 814 cn	2H), 4.79 (s, 2H	- 1
I-1000	mp86-86 C 14 NMR (CDC) <sub>3</sub> 5.19 (s. 2H), 6.86 IR(KB <sub>7</sub> ) 3432, 23	mp86-86 °C  1H NMR (CDCl <sub>3</sub> )	7.5 Hz, 3H), J = 8.8 Hz, 11 1480, 1365, 13	2.66 (s, 3H), 2. H), 7.33-7.69 (n 237, 1166, 1075	71 (q, J = 7.6 H n, 4H), 7.85 (bre	z, 2H), 3.13 (s	, 3H), 3.55 (e, J = 8.4 Hz, 1H	3H), 3.78 (s, 3H	
1.1001	mp 105-106 °C  1176 (s, 6H), 1.79 (s, 3H), 1.82 (s, 3H), 3.49 (s, 3H), 3.75 (s, 3H), 3.81 (d, J = 6.6 Hz, 2H), 4.62 (d, J = 7.2  12, 2H), 5.37 (t, J = 6.3 Hz, 1H), 5.63 (t, J = 6.9 Hz, 1H), 5.68 (brs, 1H), 5.87 (brs, 1H), 6.82 (d, J = 8.4 Hz, 1H), 6.95 (s, 2H), 7.05 (s, 1H), 7.26 (s, 1H), 7.26 (s, 1H), 7.69 (dd, J = 2.1, 8.4 Hz, 1H), 7.75 (brs, 1H)  12, 13, 13, 13, 13, 13, 13, 13, 13, 13, 13	mp 105-106 ℃  1H NMR (CDCl <sub>3</sub> ) δ 1.76 (s, 6H), 1.79 (s, 3H), 1.82 (s, 3H), 3.49 (s, 3H), 3.75 (s, 3H), 3.81 (d, J = 6.6 Hz, 2H), 4.62 (d, J = 7.2 Hz, 2H), 5.53 (t, J = 6.3 Hz, 1H), 5.63 (t, J = 6.9 Hz, 1H), 5.68 (brs, 1H), 5.87 (brs, 1H), 6.82 (d, J = 8.4 Hz, 1H), 6.95 (s, 2H), 7.05 (s, 1H), 7.26 (s, 1H), 7.69 (dd, J = 2.1, 8.4 Hz, 1H), 7.75 (brs, 1H)  1R(KBr) 3459, 2934, 1622, 1582, 1525, 1493, 1467, 1327, 1240, 1139, 1113, 1070, 817 cm <sup>-1</sup>	i, 1.79 (s, 3H), 6.63 (t, J = 6.9 d, J = 2.1, 8.4 1625, 1493, 1	1.82 (s, 3H), 3.4 9 Hz, 1H), 5.68 Hz, 1H), 7.75 (t 467, 1327, 1240	19 (e, 3H), 3.75 ( (brs, 1H), 5.87 ( brs, 1H) 1, 1139, 1113, 10	(a, 3H), 3.81 (d brs, 1H), 6.82 )70, 817 cm <sup>-1</sup>	, J = 6.6 Hz, 2H (d, J = 8.4 Hz,	I), 4.62 (d, J = 7. 1H), 6.95 (s, 2H	- 2

Table 198

	mp89-91 ℃
	11 NMR (CDCII) & 2.70 (s, 3H), 3.12 (s, 3H), 3.55 (s, 3H), 3.71 (s, 3H), 3.79 (s, 6H), 4.77 (s, 2H), 5.18 (s, 2H), 6.69 (s, 2H),
1.1002	7.14 (d, J = 8.8 Hz, 1H), 7.38-7.52 (m, 8H)
	IR(KBr) 3440, 2939, 1721, 1612, 1581, 1508, 1463, 1395, 1364, 1238, 1178, 1120, 1078, 962, 814, 523 cm 1
	mp196-197 C
	111 NMR (CDCl3) & 2.26 (8, 3H), 3.48 (8, 3H), 3.76 (8, 3H), 5.16 (8, 2H), 5.69 (brs, 1H), 5.83 (brs, 1H), 6.44 (8, 1H), 6.93
E001-1	7.05 (m, 4H), 7.26-7.45 (m, 6H), 7.84 (d, J = 8.1 Hz, 1H), 7.92 (s, 1H), 8.29 (brs, 1H)
	IR(KBr) 3407, 2934, 1672, 1589, 1524, 1459, 1425, 1400, 1316, 1288, 1213, 1119, 1057, 1006, 745 cm <sup>-1</sup>
	mμ80-81 ℃
	1H NMR (CDCl3) 6 1.29 (t, J = 7.5 Hz, 3H), 1.72 (s, 3H), 1.76 (s, 6H), 1.81 (s, 3H), 2.70 (s, 3H), 2.71 (q, J = 7.5 Hz, 2H),
1.1004	3.24 (s; 3H), 3.50 (s, 3H), 3.81 (s, 3H), 4.64 (d, J = 6.3 Hz, 2H), 4.72.4.76 (m, 2H), 5.31 (t, J = 6.9 Hz, 1H), 5.50 (t, J = 6.3 Hz, 1H)
	1H), 6.87 (s, 1H), 7.08-7.12 (m, 2H), 7.34-7.41 (m, 3H), 7.61 (s, 1H)
	IR(KBr) 3434, 2974, 2938, 1694, 1517, 1480, 1366, 1237, 1202, 1177, 1080, 972, 807, 523 cm <sup>-1</sup>
	mp167-158 C
	1H NMR (CDCl3) 6 1.31 (t, J = 7.8 Hz, 3H), 1.77 (s, 3H), 1.81 (s, 3H), 2.71 (s, 3H), 2.71 (q, J = 7.8 Hz, 2H), 3.24 (s, 3H),
1.1005	3.55 (s, 3H), 3.78 (s, 3H), 4.64 (d, J = 6.6 Hz, 2H), 5.50 (t, J = 8.1 Hz, 2H), 6.85 (s, 1H), 7.09 (d, J = 8.4 Hz, 1H), 7.33-7.38 (m,
	2H), 7.52 (d, J = 8.1 Hz, 1H), 7.58 (s, 1H), 7.84 (brs, 1H), 7.94 (d, J = 8.1 Hz, 1H)
	IR(KBr) 3434, 3350, 2938, 1727, 1523, 1480, 1368, 1248, 1178, 1165, 1080, 972, 816, 802, 522 cm <sup>-1</sup>
	mp91.93 C
	111 NMR (CDCl <sub>3</sub> ) 6 1.30 (t, J = 7.5 Hz, 3H), 1.75 (s, 6H), 1.79 (s, 3H), 1.81 (s, 3H), 2.55 (q, J = 7.5 Hz, 2H), 3.48 (s, 3H),
1.1006	1.1006 3.74 (8, 3H), 3.79 (d, J = 6.3 Hz, 2H), 4.61 (d, J = 6.6 Hz, 2H), 5.41 (t, J = 6.0 Hz, 1H), 5.53 (t, J = 6.9 Hz, 1H), 5.67 (brs, 1H),
	5.94 (brs, 1H), 6.48 (s, 1H), 6.72 (d, J = 8.4 Hz, 1H), 6.95 (s, 2H), 7.07 (s, 1H), 7.37.7.45 (m, 2H), 7.64 (d, J = 7.5 Hz, 1H),
	IR(KBr) 3433, 2932, 1609, 1621, 1489, 1461, 13958, 1308, 1286, 1245, 1192, 1114, 1072, 1011, 811 cm.1

Table 199

50	45	40	35 ·	30	·	25	20	15	10	5
1.1007		)	mp71-72 $^{\circ}$ C HI NMR (CDCh) $^{\circ}$ 1.31 (t, J = 7.5 Hz, 3H), 1.76 (a, 3H), 1.82 (a, 3H), 2.60 (q, J = 7.2 Hz, 2H), 3.47 (a, 3H), 3.75 (a, 3H), 4.61 (d, J = 6.6 Hz, 2H), 5.53 (t, J = 6.9 Hz, 2H), 5.69 (brs, 1H), 5.93 (brs, 1H), 6.47 (s, 1H), 6.78 (d, J = 8.1 Hz, 1H), 6.95 (s, 2H), 7.06 (a, 1H), 7.26 (s, 1H), 7.39 (a, 1H)  R(KBr) 3436, 2932, 1620, 1684, 1619, 1487, 1459, 1397, 1285, 1242, 1112, 1072, 819 cm <sup>-1</sup>	1.76 (s, 3H) ), 5.69 (brs, 159, 1397, 1	, 1.82 IH),	(s, 3H), 2 5.93 (brs,	.60 (q, J = 7.2 ł 1H), 6.47 (s, 1H)	lz, 211), 3.47 ), 6.78 (d, J =	(s, 3H), 3.75 (s,	3H), )5 (8,
1.1008	mp 171-173 °C 111 NMR (CDCh <sub>3</sub> )	)	H), 3.75 (e, 3H), .08 (d, J = 1.9 Hz 7, 1482, 1388, 13	5.15 (в, 2Н; г, 1Н), 7.37 284, 1247,	), 5.6F -7.48	i (a, 111), 6 (m, 7H), 7 1107, 106	.88 (s, 1H), 6.44 .59 (d, J = 8.4 H 9, 1006, 938, 82	z, 2H), 6.95 z, 2H)	) (dd, J = 8.4, 1.5	Hz,
1.1009	mp 180·182 °C  1H NMR (CDCl <sub>3</sub> )	<ul> <li>δ 2.68 (s, 3]</li> <li>), 7.57 (d, J = ε</li> <li>478, 1370, 117</li> </ul>	H), 3.13 (s, 3H), 3.7 Hz, 2H) 7, 1085, 1012, 8	3.53 (s, 3H 13, 797 cm	), 3.77	7 ( <b>9,</b> 3H), <sup>§</sup>	5.19 (s, 2H), 6.8	3 (8, 1H), 7.18	5 (d, J = 8.4 Hz,	1H),
1.1010	mp 128-130 °C  1H NMR (CDCl <sub>3</sub> ) & 1.76 (s, 3H), 1.82 (s, 3H), 3.46 (s, 3H), 3.75 (s, 3H), 4.62 (d, J = 7.0 Hz, 2H), 5.53 (t, J = 7.0 Hz, 1H),  5.69 (s, 1H), 5.85 (s, 1H), 6.44 (s, 1H), 6.93 (dd, J = 8.4, 1.6 Hz, 1H), 6.97 (d, J = 8.4 Hz, 1H), 7.05 (d, J = 1.6 Hz, 1H), 7.42 (d, J = 8.4 Hz, 2H), 7.59 (d, J = 8.4 Hz, 2H)  IR (KBr) 1517, 1482, 1287, 1244, 1106, 1070, 1013, 822, 783 cm <sup>-1</sup>	) \$\delta\$ 1.76 (s, 3] (s, 1H), 6.44 (t) 7.59 (d, J = 8.4 482, 1287, 124	H), 1.82 (s, 3H), s, 1H), 6.93 (dd, 4 Hz, 2H) 4, 1106, 1070, 10	3.46 (s, 3H J = 8.4, 1.6 013, 822, 78	l), 3.7 Hz, 1 33 cm	6 (s, 3H), H), 6.97 (d	4.62 (d, J = 7.0 , J = 8.4 Hz, 1H	Hz, 2H), 5.6; ), 7.05 (d, J =	3 (t, J = 7.0 Hz,	1H), 2 (d,
1.1011	mp 138·140 °C <sup>1</sup> H NMR (CDCl <sub>3</sub> ) & 1.76 (a, 3H), 1.81 (e, 3H), 2.72 (a, 3H), 3.23 (a, 3H), 3.54 (a, 3H), 3.78 (a, 3H), 4.64 (d, J = 6.5 Hz, 2H), <sup>1</sup> E 49 (t, J = 6.5 Hz, 1H), 6.83 (a, 1H), 7.09 (d, J = 8.3 Hz, 1H), 7.34 (dd, J = 8.3, 2.0 Hz, 1H), 7.39 (d, J = 2.0 Hz, 1H), 7.43 (d, J = 8.6 Hz, 2H), 7.57 (d, J = 8.6 Hz, 2H) <sup>1</sup> E (KBr) 1518, 1478, 1369, 1177, 1083, 972, 814, 795 cm <sup>-1</sup>	(a, 1176 (e, 31)), (a, 1117), (b, 31 = 8.6), (a, 31	np 138-140 °C H NMR (CDCl <sub>3</sub> ) & 1.76 (e, 3H), 1.81 (e, 3H), 2.72 (e, 3H), 3.23 (e, 3H), 3.54 (e, 3H), 3.78 (e, 3H), 4.64 (d, J = 6.5 Hz, 2H), 5.49 (t, J = 6.5 Hz, 1H), 6.83 (e, 1H), 7.09 (d, J = 8.3 Hz, 1H), 7.34 (dd, J = 8.3, 2.0 Hz, 1H), 7.39 (d, J = 2.0 Hz, 1H), 7.43 (d, J = 8.6 Hz, 2H), 7.57 (d, J = 8.6 Hz, 2H)  R (KBr) 1518, 1478, 1369, 1177, 1083, 972, 814, 795 cm <sup>-1</sup>	2.72 (s, 3H = 8.3 Hz, 1I 4, 795 cm <sup>-1</sup>	), 3.2% 1), 7.3	3 (s, 3H), {	8.3, 2.0 Hz, 1H)	(e, 3H), 4.64 , 7.39 (d, J =	1 (d, J = 6.5 Hz, 2.0 Hz, 1H), 7.4	2H),

Table 200

	mp 135-138 °C
	11 NMR ((3)(3) $\delta$ 1.55-1.63 (m, 211), 1.77 (8, 611), 1.83 (8, 611), 4.56 (d, $J = 6.6 \text{ Hz}$ , 411), 4.66 (d, $J = 4.5 \text{ Hz}$ , 411), 5.50-5.58
1-1012	(m, 2H), 6.96-7.01 (m, 4H), 7.32-7.38 (m, 4H), 7.45 (s, 2H)
	IR (KBr) 3339, 2914, 1609, 1520, 1488, 1385, 1289, 1238, 1177, 1000, 834, 651 cm <sup>-1</sup>
	mp 202-205 °C
	1H NMR (CDCL1+CD3OD) $\delta$ 1.78 (e, 3H), 1.82 (e, 3H), 4.57 (d, $J=6.6$ Hz, 2H), 4.62 (e, 4H), 5.50-5.56 (m, 1H), 6.86-7.00
1.1013	(in, 4H), 7.24-7.37 (in, 4H), 7.44 (s, 2H)
	IR (KBr) 3399, 2974, 2930, 1610, 1522, 1489, 1438, 1383, 1238, 1176, 999, 903, 838, 538 cm <sup>-1</sup>
	mp 219.221 °C
	1H NMR (CDCl.) 6 2.22 (s, 3H), 2.69 (s, 3H), 3.13 (s, 3H), 3.53 (s, 3H), 3.77 (s, 3H), 5.19 (s, 2H), 6.85 (s, 1H), 7.15 (d, J =
1.1014	8.4 Hz, 1H), 7.32-7.49 (m, 7H), 7.60 (s, 4H)
	IR (KBr) 3384, 1701, 1604, 1524, 1482, 1355, 1294, 1176, 1084, 1011, 945, 818 cm <sup>-1</sup>
	mp 173.176 ℃
	1H NMR (DMSO-d6) & 1.74 (8, 3H), 1.77 (8, 3H), 2.08 (8, 3H), 2.87 (8, 3H), 3.36 (8, 3H), 3.47 (8, 3H), 3.77 (8, 3H), 4.68 (4, J
1.1015	= 6.4 Hz, 211), 5.48 (t, J = 6.4 Hz, 1H), 7.02 (s, 1H), 7.26-7.29 (m, 3H), 7.57 (d, J = 8.7 Hz, 2H), 7.70 (d, J = 8.7 Hz, 2H), 10.07
	(s, 1H)
	IR (KBr) 3383, 1704, 1235, 1524, 1481, 1360, 1177, 1083, 976, 816 cm <sup>-1</sup>
	mp 144-145 C
	<sup>1</sup> H NMR (CDCl <sub>1</sub> ) $\delta$ 1.77 (s, 3H), 1.81 (s, 3H), 2.70 (s, 3H), 3.21 (s, 3H), 3.62 (s, 3H), 3.69 (d, J = 1.6 Hz, 3H), 4.65 (d, J = 6.8)
1.1016	1-1016 Hz, 2H), 5.53 (t, J = 6.8 Hz, 1H), 7.08 (t, J = 8.4 Hz, 1H), 7.16 (dd, J = 8.4, 1.8 Hz, 1H), 7.20 (dd, J = 11.7, 1.8 Hz, 1H), 7.41
	(d, J = 8.8 Hz, 2H), 7.59 (dd, J = 8.8; 1.4 Hz, 2H)
	IR (KBr) 1521, 1470, 1368, 1265, 1177, 1151, 1038, 971, 875 cm <sup>-1</sup>

Table 201

5	49 (t, J = 8.6 Hz, (e, 1H), Hz, 1H),
10	mp 196-198 °C HI NMR (HMSO-dc) \$\delta\$ 1.72 (8, 3H), 1.76 (8, 3H), 2.07 (8, 3H), 3.31 (8, 3H), 3.65 (8, 3H), 4.55 (d, J = 6.6 Hz, 2H), 5.49 (t, J = 6.6 Hz, 1H), 6.43 (8, 1H), 6.43 (8, 1H), 6.65 (dd, J = 8.4, 1.9 Hz, 1H), 6.73 (d, J = 1.9 Hz, 1H), 6.90 (d, J = 8.4 Hz, 1H), 7.55 (d, J = 8.6 Hz, 2H), 7.65 (d, J = 8.6 Hz, 2H), 8.58 (br s, 1H), 8.70 (br s, 1H), 10.02 (s, 1H)  IR (KBr) 3358, 1661, 1556, 1523, 1489, 1396, 1308, 1254, 1227, 1114, 1074 cm <sup>-1</sup> mp 141-143 °C HI NMR (CDCl <sub>3</sub> ) \$\delta\$ 1.76 (s, 3H), 1.81 (s, 3H), 3.40 (s, 3H), 3.64 (d, J = 0.9 Hz, 3H), 4.64 (d, J = 6.9 Hz, 2H), 4.89 (s, 1H), 5.50 (s, 1H), 6.94 (d, J = 8.7 Hz, 1H), 7.06 (t, J = 8.7 Hz, 1H), 7.21 (ddd, J = 8.4, 2.1, 1.1 Hz, 1H), 7.27 (dd, J = 12.3, 2.1 Hz, 1H), 7.44 (dd, J = 8.7, 1.5 Hz, 2H)  IR (KBr) 3485, 1523, 1466, 1402, 1266, 1173, 1036, 961, 918, 837, 814 cm <sup>-1</sup>
15	3H), 4.55 (d, J) 3 (d, J = 8.4 Hz (h, J = 6.4 Hz (h, J = 6.4 Hz (H), 7.21 (ddd,
20	(a, 31), 3.65 (a,9 Hz, 1H), 6.9 4, 1074 cm <sup>-1</sup> 4, 1074 cm <sup>-1</sup> 5, 1 = 0.9 Hz, 3F (t, J = 8.7 Hz, 14 cm <sup>-1</sup> )
25	7 (e, 3H), 3.31 (f), 6.73 (d, J = 1), 6.73 (d, J = 1), 10.02 (f), 111, 1254, 1227, 111, 112, 2H), 7.06 (f), 2H), 7.06 (f), 2H)
30	1.76 (e, 3H), 2.0 1.76 (e, 3H), 2.0 1.396, 1308, 1 1.396, 1308, 1 1.397, 3.00 1.397, 1.51 1.507, 1.507, 1.507 1.507, 1.507
35	5 1.72 (a, 3H), -1), 6.65 (dd, J = z, 2H), 8.58 (br 1596, 1523, 148 1.76 (a, 3H), 1.8 ), 5.70 (a, 1H), Hz, 1H), 7.44 (d
40	mp 196-198 °C 111 NMR (DMSO-dc)
45 _	11 NM 196 112, 211), 7.4 211), 7.4 211), 7.4 111 (KB mp 141 111 NM 5.56 (t, 7.27 (de 118 (KB m) 118

1.1017

	mp81.82 ℃
	1H NMR (CDCl <sub>3</sub> ) 6 1.77 (s, 3H), 1.81 (s, 3H), 2.26 (s, 3H), 2.72 (s, 3H), 3.23 (s, 3H), 3.57 (s, 3H), 3.79 (s, 3H), 4.64 (d, J =
119	119 6.3 Hz, 2H), 5.49 (t, J = 6.3 Hz, 1H), 6.83 (e, 1H), 7.09 (d, J = 8.4 Hz, 1H), 7.33-7.39 (m, 2H), 7.48 (e, 1H), 7.82 (d, J = 6.0 Hz,
	1H), 7.88 (s, 1H), 8.32 (brs, 1H)
	IR(KBr) 3382, 2939, 1736, 1520, 1483, 1365, 1293, 1178, 1119, 1078, 958, 802, 521 cm <sup>-1</sup>
	mp93.94 °C
5	1H NMR (CDCl <sub>3</sub> ) & 2.62 (s, 3H), 2.99 (s, 3H), 3.16 (s, 3H), 3.20 (s, 3H), 3.83 (s, 3H), 5.21 (s, 2H), 6.91 (s, 2H), 7.17 (d, J=
2	8.2 Hz, 1H), 7.35-7.48 (m, 8H), 7.63 (d, J = 8.4 Hz, 2H)
	IR(KBr) 3434, 3033, 2938, 1611, 1520, 1479, 1366, 1179, 1151, 1085, 969, 850, 793, 519 cm <sup>-1</sup>

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Table 202

1.1021 5	mp74-75 °C III NMR (CDCls) & 1.76 (8, 3H), 1.82 (8, 3H), 3.48 (8, 3H), 3.75 (8, 3H), 4.61 (d, J = 6.3 Hz, 2H), 5.53 (t, J = 5.4 Hz, 1H),
	H NMR (CDCl <sub>3</sub> ) $\delta$ 1.76 (8, 3H), 1.82 (8, 3H), 3.48 (8, 3H), 3.75 (8, 3H), 4.61 (d, $J = 6.3$ Hz, 2H), 5.63 (t, $J = 5.4$ Hz, 1H),
7	5.69 (brs, 111), 5.86 (brs, 111), 6.42 (s, 111), 6.83 (d, J = 8.7 Hz, 111), 6.91-6.98 (m, 2H), 7.04 (s, 1H), 7.62 (d, J = 8.7 Hz, 1H),
	7.73 (s, 111)
	IR(KBr) 3495, 3398, 2935, 1633, 1622, 1487, 1291, 1246, 1112, 1072, 821, 788 cm <sup>-1</sup>
8	mp76.77 °C
	11 NMR (CDCM) $\delta$ 1.77 (s, 311), 1.82 (s, 311), 1.84 (s, 311), 3.52 (s, 3H), 3.78 (s, 3H), 4.63 (d, $J = 6.9 \text{ Hz}$ , 2H), 5.53 (t, $J = 6.6 \text{ Hz}$
1-1022   F	1.1022 Hz, 1H), 5.74 (brs, 1H), 5.80 (brs, 1H), 6.47 (s, 1H), 6.92-7.00 (m, 2H), 7.04 (s, 1H), 7.38 (d, J = 8.1 Hz, 1H), 7.93 (d, J = 8.1
	Hz, 1H), 8.04 (s, 1H)
-	IR(KBr) 3411, 2934, 1662, 1519, 1488, 1425, 1309, 1245, 1175, 1128, 1071, 1050 cm <sup>-1</sup>
E	mp81.82 C
	111 NMIR (CDCI3) & 1.77 (s, 3H), 1.81 (s, 3H), 2.66 (s, 3H), 2.99 (s, 3H), 3.18 (s, 3H), 3.25 (s, 3H), 3.82 (s, 3H), 4.64 (d, J =
1.1023 6	6.6 Hz, 2H), 5.49 (t, J = 6.0 Hz, 1H), 6.90 (g, 1H), 7.10 (d, J = 8.4 Hz, 1H), 7.38-7.43 (m, 3H), 7.62 (d, J = 8.8 Hz, 1H), 8.02 (g,
	IH)
	IR(KBr) 3434, 3027, 2938, 1672, 1611, 1520, 1479, 1365, 1179, 1117, 1074, 970, 847, 793, 519 cm <sup>-1</sup>
	mp77-79 ℃
	1H NMR (CDC1 <sub>3</sub> ) & 1.78 (s, 3H), 1.83 (s, 3H), 3.77 (s, 3H), 4.63 (d, J = 6.6 Hz, 2H), 5.53 (t, J = 6.2 Hz, 1H), 5.76 (brs, 2H),
1.1024	6.52 (s, 1H), 6.91.7.02 (m, 6H), 7.46 (d, J = 8.4 Hz, 2H)
1	IR(KBr) 3465, 2935, 1613, 1686, 1624, 1487, 1359, 1282, 1245, 1222, 1173, 1167, 1112, 1065, 974, 867, 521 cm <sup>-1</sup>
<u> </u>	mp78-79 °C
	1H NMR (CDCl <sub>3</sub> ) 8 2.73 (6, 3H), 2.78 (6, 3H), 3.15 (6, 3H), 3.21 (6, 3H), 3.62 (6, 3H), 5.22 (6, 2H), 7.20 (d, J = 8.4 Hz, 1H),
1-1026	7.37.7.44 (m, 10H), 7.68 (d, J = 8.8 Hz, 2H)
	IR(KBr) 3433, 3032, 2939, 1519, 1473, 1366, 1178, 1151, 1004, 966, 870, 847, 795, 524 cm <sup>-1</sup>

## EP 0 933 346 A1

Table 203

55

	 50	45	40	35	30	25	20	15	10	5
1.1026		υ (C (1) (C) (1) (β 1) (1) (C) (C) (C) (C) (C) (C) (C) (C) (C) (C	17 (t, J = 6. 1), 6.91 (dd, e	.9 Hz, 3H), 2.4 J = 2.1, 8.1 Hz 240, 1194, 117	11 (s, 3H), 3.2 2, 1H), 6.96-7-1 75, 1146, 1084	mp 158-159 ℃ HI NMR (CDCL <sub>3</sub> ) δ 1.47 (t, J = 6.9 Hz, 3H), 2.41 (s, 3H), 3.21 (s, 3H), 3.55 (s, 3H 5.22 (s, 2H), 6.83 (s, 1H), 6.91 (dd, J = 2.1, 8.1 Hz, 1H), 6.96-7.01 (m, 2H), 7.28-7.4E IR (KBr) 1517, 1482, 1392, 1362, 1240, 1194, 1175, 1146, 1084, 963, 878, 797 cm <sup>-1</sup>	mp 158-159 °C. HI NMR (CDCl <sub>3</sub> ) & 1.47 (t, J = 6.9 Hz, 3H), 2.41 (s, 3H), 3.21 (s, 3H), 3.55 (s, 3H), 3.77 (s, 3H), 4.14 (q, J = 6.9 Hz, 2H), 5.22 (s, 2H), 6.83 (s, 1H), 6.91 (dd, J = 2.1, 8.1 Hz, 1H), 6.96-7.01 (m, 2H), 7.28-7.48 (m, 7H), 7.66-7.72 (m, 2H)  (R (KBr) 1517, 1482, 1392, 1362, 1240, 1194, 1175, 1146, 1084, 963, 878, 797 cm. <sup>1</sup>	8, 3H), 4.14 (	q, J = 6.9 Hz, n, 2H)	2H),
1.1027	TH (KBF) 1607	7 (°. :DC:1:1)	27 (s, 6H), 3 190, 1467, 1-	1.87 (s, 3H), 5. 155, 1383, 129	20 (s, 211), 6.9 14, 1267, 1246	(3-7.00 (m, 2H) 1, 1178, 1125, 1	mp 106-107 t; 1-1027 <sup>1</sup> H NMR (CDCt <sub>3</sub> )	6H), 7.23-7.6 3, 813, 744 cm	52 (m, 711) <sub>n</sub> .¹	
1.108	mp 162-168 111 NMR (C 5.91 (s, 1H) 1R (KBr) 34 1127, 1110,	1 C (1) (1) (2) (1) (1) (2) (2) (3) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4)	C. (13) & 1.45 (t, J = 6.9 Hz, 3H	9 Hz, 3H), 3.4 (m, 2H), 6.95- 1488, 1462, 1 731 cm.1	16 (s, 3H), 3.7 7.03 (m, 2H), 464, 1400, 13	4 (s, 3H), 4.15 7.05 (d, J = 1.5 179, 1358, 131	mp 162-163 °C.  III NMR (CDCE) & 1.45 (t, J = 6.9 Hz, 3H), 3.46 (s, 3H), 3.74 (s, 3H), 4.15 (q, J = 6.9 Hz, 2H), 4.98 (s, 1H), 5.19 (s, 2H), 5.91 (s, 1H), 6.45 (s, 1H), 6.88-6.94 (m, 2H), 6.95-7.03 (m, 2H), 7.05 (d, J = 1.2 Hz, 1H), 7.27-7.41 (m, 3H), 7.45-7.56 (m, 4H)  IR (KBr) 3424, 3343, 1611, 1521, 1488, 1462, 1464, 1400, 1379, 1358, 1317, 1290, 1278, 1262, 1240, 1225, 1201, 1185, 1127, 1110, 1068, 1026, 1007, 828, 731 cm <sup>-1</sup>	, 2H), 4.98 (s. -7.41 (m, 3H) 1262, 1240,	, 1H), 5.19 (s, , 7.45-7.56 (m	2H), 4H) 185,
1.1029	пр 73-74 °C 111 NMR (СПС) 2H), 7.00-7.16 1R (KBr) 1610,	C (DCla) & 1. (16 (m, 5H), (10, 1521, 14	(th.) & 1.77 (s, 311), 1.82 (s, 3 (m, 5H), 7.26-7.34 (m, 2H)), 1.521, 1489, 1461, 1438, 1	.82 (s, 3H), 2 n, 2H) 438, 1297, 127	27 (a, 611), 3.8 16, 1249, 1231	6 (s, 311), 4.63	mp 73-74 °C.  11 NMR (CDC3,) \$\delta\$ 1.77 (s, 311), 1.82 (s, 311), 2.27 (s, 611), 3.86 (s, 311), 4.63 (d, J = 7.2 Hz, 2H), 5.56 (m, 1H), 6.92-7.00 (m, 2H), 7.00-7.16 (m, 5H), 7.26-7.34 (m, 2H)  12 (KBr) 1610, 1521, 1489, 1461, 1438, 1297, 1276, 1249, 1231, 1181, 1122, 1028, 985, 835 cm <sup>-1</sup>	2H), 6.56 (m,	1H), 6.92-7.0	(m)
-1030		C. (1) (4) (4) (7) (7) (7) (8) (9) (9) (9) (1) (10) (10) (10) (10) (10) (10) (10)	.46 (t, J = 6. = 6.9 Hz, 2P 149, 1413, 13	9 Hz, 3H), 1.7 H), 4.63 (d, J <sup>±</sup> 389, 1366, 123	75 (s, 3H), 1.7 = 6.3 Hz, 2H), 19, 1199, 1180	9 (d, J = 0.9 H 6.63 (m, 1H), 1150, 1082, 5	mp 86-87 °C.  14 NMR (CDCl <sub>3</sub> ) & 1.46 (t, J = 6.9 Hz, 3H), 1.75 (s, 3H), 1.79 (d, J = 0.9 Hz, 3H), 2.54 (s, 3H), 3.21 (s, 3H), 3.56 (s, 3H), 3.78 (s, 3H), 4.12 (q, J = 6.9 Hz, 2H), 4.63 (d, J = 6.3 Hz, 2H), 5.53 (m, 1H), 6.84 (s, 1H), 6.93-7.01 (m, 3H), 7.35-7.41 (m, 2H), 7.67-7.73 (m, 2H)  24), 7.67-7.73 (m, 2H)  18 (KBr) 1518, 1480, 1449, 1413, 1389, 1366, 1239, 1199, 1180, 1160, 1082, 970, 872, 798 cm. <sup>1</sup>	, 3H), 3.21 (s. 3.93-7.01 (m, m <sup>-1</sup>	, 3H), 3.56 (s, 3H), 7.35-7.4	3H),

Table 204

	mp 145-146 C
	111 NMR (CDCta) & 1.44 (t, J = 6.9 Hz, 3H), 1.74 (s, 3H), 1.77 (d, J = 0.9 Hz, 3H), 3.47 (s, 3H), 3.75 (s, 3H), 4.13 (q, J = 6.9
1-1031	11z, 211), 4.63 (d, J = 6.6 11z, 2H), 5.10 (s, 1H), 5.56 (m, 1H), 5.91 (s, 1H), 6.46 (s, 1H), 6.89-6.94 (m, 2H), 6.96-7.03 (m, 3H),
	7.50.7.56 (m, 2H)
	IR (KBr) 3404, 1611, 1520, 1487, 1464, 1442, 1391, 1358, 1293, 1264, 1237, 1224, 1192, 1112, 1071, 1030, 1002, 831 cm.1
	mp 142.145 C
	111 NMR (CDCM) $\delta$ 3.13 (8, 311), 3.21 (8, 311), 4.63 (8, 214), 4.65 (8, 214), 5.19 (8, 214), 7.15 (d, $J = 8.4$ Hz, 1H), 7.33·7.52 (m,
1.1032	(HC1
	IR (KBr) 3519, 3422, 3380, 3032, 2933, 1611, 1519, 1487, 1364, 1171, 1148, 1109, 969, 871, 817, 527 cm <sup>-1</sup>
	mp 103-106 C
	111 NMR (CDC)1,+CD3OD) 6 1.78 (s, 3H), 1.82 (s, 3H), 3.22 (s, 3H), 3.24 (s, 3H), 4.58-4.67 (m, 6H), 5.46-5.54 (m, 1H), 7.09
1.1033	(d, J = 8.4 Hz, 1H), 7.33-7.53 (m, 8H)
	IR (KBr) 3512, 3414, 3012, 2941, 1612, 1519, 1488, 1362, 1335, 1146, 997, 972, 876, 524 cm <sup>-1</sup>
	mp 184.187 ℃
	111 NMR (CDCl3+CD3OD) & 1.78 (s, 3H), 1.82 (s, 3H), 4.59-4.65 (m, 6H), 5.52-5.59 (m, 1H), 6.84-6.98 (m, 5H), 7.23-7.28
1.1034	(m, 2H), 7.44 (s, 1H), 7.45 (s, 1H)
	IR (KBr) 3400, 2931, 1611, 1521, 1491, 1247, 1203, 1009, 987, 834 cm <sup>-1</sup>
	mp 95-96 С
1.1035	1-1035 HI NMR (CDCh.) 6 2.27 (8, 6H), 2.41 (8, 3H), 5.19 (8, 2H), 7.02-7.18 (m, 5H), 7.22-7.54 (m, 9H)
	IR (KBr) 1522, 1512, 1454, 1377, 1309, 1297, 1274, 1267, 1236, 1125, 1008, 877, 822, 742, 696 cm.
	ე 96-90 ე
1.1036	•
	IR (KBr) 1518, 1499, 1482, 1464, 1380, 1300, 1278, 1262, 1227, 1125, 1090, 1021, 1015, 875, 834, 817, 739 cm.1

Table 205

	mp 58-59 °C
-	HI NMR (CDCh.) & 1.77 (d, J = 0.6 Hz, 3H), 1.81 (d, J = 0.9 Hz, 3H), 2.27 (s, 6H), 2.41 (s, 3H), 4.63 (d, J = 6.6 Hz, 2H), 5.56
1.10.5	
	IR (KBr) 1520, 1490, 1460, 1444, 1385, 1294, 1271, 1262, 1232, 1125, 1001, 828, 818 cm <sup>-1</sup>
	mp 67-68 Ն
9000	<sup>1</sup> HI NMR (CDCl <sub>3</sub> ) δ 1.77 (8, 3H), 1.81 (d, J = 0.9 Hz, 3H), 2.25 (8, 3H), 2.27 (8, 3H), 4.64 (d, J = 6.6 Hz, 2H), 5.55 (m, 1H),
£ 0.2	6.90.7.14 (m, 611), 7.26.7.32 (m, 211), 7.36-7.42 (m, 211)
	IR (KBr) 1518, 1500, 1482, 1466, 1309, 1299, 1267, 1229, 1124, 1090, 995, 834 cm <sup>-1</sup>
	mp 153-165℃
	<sup>1</sup> HI NMR (CDCl <sub>3</sub> ) $\delta$ 3.45 (a, 3H), 3.75 (s, 3H), 4.84 (d, $J = 4.2$ Hz, 2H), 6.43 $\sim$ 6.51 (m, 2H), 6.45 (s, 1H), 6.92 (d, $J = 8.7$ Hz,
1.1039	2H), $6.94 \sim 7.00$ (m, 2H), $7.08$ (brs, 1H), $7.53$ (d, $J = 8.7$ Hz, 2H)
	IR (KBr) 3411, 1612, 1588, 1523, 1489, 1288, 1245, 1224, 1113, 1070, 1011, 938, 824 cm.1
	foam
_	111 NMR (CDCl <sub>3</sub> ) 6 3.28 (d, J = 2.4 Hz, 1H), 3.45 (s, 3H), 3.75 (s, 3H), 4.94 (dd, J = 6.0, 1.8 Hz, 2H), 5.74 (ddt, J = 11.1, 2.4,
1.1040	1.1040 1.8 Hz, 1H), 6.27 (dt, $J = 11.1, 6.0 \text{ Hz}$ , 1H), 6.45 (s, 1H), 6.92 (d, $J = 8.7 \text{ Hz}$ , 2H), 6.94 ~ 7.00 (m, 2H), 7.07 (d, $J = 2.1 \text{ Hz}$ , 1H),
	7.53 (d, J = 8.7  Hz, 2H)
	IR (KBr) 3433, 3279, 1612, 1588, 1523, 1489, 1286, 1248, 1223, 1113, 1070, 1011, 938, 825 cm <sup>-1</sup>
	foam
	<sup>1</sup> H NMR (CDCl <sub>3</sub> ) δ 3.45 (e, 3H), 3.75 (e, 3H), 4.90 (d, J = 1.8 Hz, 2H), 5.55 (dd, J = 10.8, 2.4 Hz, 1H), 5.71 (dd, J = 17.7, 2.4
I-1041	1.1041   Hz, 1H), 5.85 (ddt, J = 17.7, 10.8, 1.8 Hz, 1H), 6.45 (e, 1H), 6.92 (d, J = 8.7 Hz, 2H), 6.97 (dd, J = 8.4, 2.1 Hz, 1H), 7.07 (d, J
	= 8.4  Hz, 1H), 7.08 (d, $J = 2.1  Hz$ , 1H), 7.53 (d, $J = 8.7  Hz$ , 2H)
	IR (KBr) 3433, 1612, 1589, 1523, 1489, 1286, 1224, 1192, 1112, 1070, 1002, 937, 825, 815 cm <sup>-1</sup>

Table 206

	1.00 1.00 1.00
	7 /81-691 dia
	111 NMR (CDCL) & 1.76 (s, 311), 1.81 (s, 311), 2.76 (s, 311), 3.23 (s, 311), 3.50 (s, 311), 3.78 (s, 311), 4.64 (d, J = 6.6 Hz, 2H),
1.1042	1.1042 5.50 (t, J = 6.6 Hz, 111), 6.63 (t, J = 2.4 Hz, 111), 6.95 (s, 111), 7.09 (d, J = 8.5 Hz, 111), 7.26-7.29 (m, 111), 7.37 (dd, J = 8.5, 2.1
	112, 111), 7.42 (d, J = 2.1 112, 111), 7.45-7.51 (m, 211), 7.89 (s, 111), 8.26 (br s, 111)
	IR (KBr) 3418, 1473, 1362, 1177, 1079, 961, 817, 796 cm <sup>-1</sup>
	mp 152-154 C
	111 NMR (CDCh.) 5 1.76 (8, 311), 1.82 (8, 311), 3.43 (8, 311), 3.76 (8, 311), 4.61 (d, J = 6.9 Hz, 2H), 5.53 (t, J = 6.9 Hz, 1H),
1.1043	1.1043 5.69 (s, 111), 6.98 (s, 111), 6.55 (s, 111), 6.63 (t, J = 2.1 Hz, 111), 6.94-7.01 (m, 211), 7.10 (d, J = 0.9 Hz, 111), 7.25-7.27 (m, 111),
	7.46 (d, J = 8.4 Hz, 1H), 7.51 (dd, J = 8.5, 1.5 Hz, 1H), 7.89 (s, 1H), 8.24 (br s, 1H)
	(R (CHCl <sub>3</sub> ) 3529, 3480, 1515, 1405, 1407, 1291, 1246, 1107, 1070 cm <sup>-1</sup>
	mp 127-128 C
,	1H NMR (CDCl <sub>3</sub> ) 6 2.46 (s, 3H), 3.62 (s, 3H), 3.77 (s, 3H), 3.91 (s, 3H), 5.22 (s, 2H), 6.84 (s, 1H), 6.91 (dd, J = 8.4, 2.1 Hz,
1.104	1H), 6.79.7.00 (m, 2H), 7.12.7.18 (m, 2H), 7.30.7.47 (m, 5H), 7.59.7.63 (m, 2H)
	IR (CHCE) 2938, 2843, 1606, 1585, 1520, 1483, 1464, 1443, 1390, 1368, 1174, 1141, 1083, 1013, 962, 936, 865, 838 cm <sup>-1</sup>
	mp 124-127 C
	1H NMR (CDCl <sub>3</sub> ) δ 2.46 (s, 3H), 3.55 (s, 3H), 3.77 (s, 3H), 3.91 (s, 3H), 5.21 (s, 2H), 5.42 (br, 1H), 6.82 (s, 1H), 6.90 (dd, J=
1-1045	8.4, 1.8 Hz, 111), 6.97-7.10 (m, 3H), 7.29-7.47 (m, 7H)
	IR (CHCl <sub>3</sub> ) 3579, 2938, 1600, 1523, 1484, 1464, 1393, 1368, 1327, 1282, 1174, 1141, 1081, 1036, 1012, 962, 908 cm <sup>1</sup>
	mp 178-180 C
	1H NMR (CDC13) 6 2.44 (s, 3H), 3.29 (s, 3H), 3.58 (s, 3H), 3.78 (s, 3H), 3.91 (s, 3H), 5.22 (s, 2H), 6.83 (s, 1H), 6.99 (dd, J=
1.1046	8.1, 2.1 Hz, 1H), 6.97-7.25 (m, 2H), 7.31-7.58 (m, 8H)
	IR (CHCl <sub>3</sub> ) 2939, 2840, 1591, 1519, 1483, 1464, 1374, 1331, 1173, 1141, 1116, 1082, 1012, 964, 863 cm <sup>-1</sup>

Table 207

20 .	τ: (21)(21 <sub>31</sub> ) δ 2.35 (s, 311), 5.22 (s, 211), 6.59 (t, J F·H = 54.6 Hz, 211), 7.09-7.50 (m, 1211), 7.74-7.75 (d, J = 4.5 Hz, 1752, 1523, 1493, 1384, 1273, 1169, 1133, 1070, 1037, 916, <u>851</u> cm <sup>-1</sup>	mp 112-114 °C  111 NMR (CDCl <sub>3</sub> )	mp 203-204 °C <sup>1</sup> H NMR (СD3OD)	IND 99-100 °C  III NMR (CDCl <sub>3</sub> ) \$\tilde{c}\$ 1.75 (a, 3H), 1.78-1.79 (d, J = 0.9 Hz, 3H), 3.46 (a, 3H), 3.75 (a, 3H), 3.88 (a, 3H), 4.62-4.64 (d, J = 6.6)  III NMR (CDCl <sub>3</sub> ) \$\tilde{c}\$ 1.75 (a, 1H), 6.46 (a, 1H), 6.96-7.02 (m, 3H), 7.12-7.18 (m, 2H), 7.59-7.64 (m, 2H)  IR (CHCl <sub>3</sub> ) 3513, 2938, 1605, 1583, 1490, 1423, 1407, 1392, 1362, 1318, 1269, 1177, 1158, 1140, 1118, 1078, 1038, 1012, 930, 846, 826 cm.\( \text{I} \)	mp 163·164 °C 11 NMR (CDCl <sub>3</sub> )
30	mp 98-99 °C: HI NMR (CDCE) & 2.35 (s, 3H), 5.22 (s, 2H), 6.69 (t, J F-H = 54.6 Hz, 2H), 7.  2H)  IR (CHCE) 1752, 1523, 1493, 1384, 1273, 1169, 1133, 1070, 1037, 916, 851 cm <sup>-1</sup>	311), 1.78-1.79 (d, 11), 6.84 (s, 111), 6 14, 1443, 1416, 13	), 5.21 (s, 2H), 6.8 1434, 1380, 1317	, J = 0.9 Hz, 3H), ), 6.96-7.02 (m, 3F); 33, 1407, 1392, 13	, J = 0.9 Hz, 3H), ), 6.84 (s, 1H), 6.90 4, 1332, 1239, 117
35	3H), 5.22 (s, 2H) 1384, 1273, 1169	6 (d, J = 0.6 Hz, (z, 211), 5.54 (s, 1 1519, 1483, 146	, 2H),4.55 (s, 2H) 523, 1490, 1462,	3H), 1.78-1.79 (d 1H), 6.46 (e, 1H 1583, 1490, 142	3H), 1.79-1.80 (d 2H), 6.54 (m, 1H) 1483, 1464, 137
40	(?) <sub>3</sub> )	Chab	) (OD)	213)	2) 2)a)
45	inp 98-99 °C III NMR (CDC 2H) IR (CHCla) 178	mp 112-114 °C 111 NMR (CDC) (6, 31D, 4.62-4.6 1R (CHC)a) 293 cm <sup>-1</sup>	IND 203-204 °C 1H NMR (CD3OD) & 4.53 IR (KBr) 3380, 1611, 1586, 817, 787, 730, 693, 646 cm <sup>-1</sup>	mp 99-100 °C 111 NMR (CDCl3) Hz, 2H), 5.57 (m, IR (CHCl3) 3513, 930, 846, 826 cm <sup>-1</sup>	
50	1.107	.1038	.1049	.1050	1001.

Table 208

nmorphous  11.1052 7.39-7.52 (m, 71l)  1R (CHCL <sub>3</sub> ) 3597, 3535, 2937, 1731, 1612, 1589, 1622, 14  939, 835 cm <sup>-1</sup> mp 141-142 C  11 NMR (CHCL <sub>3</sub> ) 6 1.75 (s, 3H), 1.78-1.79 (d, J = 0.9 Hi  11z, 2H), 5.30 (d, J F.H = 3.3 Hz, 1H), 5.57 (m, 1H), 5.88  11.7, 2.1 Hz, 1H)  1R (CHCl <sub>3</sub> ) 3578, 3514, 1621, 1600, 1683, 1623, 1492, 14  902 cm <sup>-1</sup> mp 138-140 C  1H NMR (CHCl <sub>3</sub> ) 6 5.17 (s, 2H), 5.60 (s, 1H), 5.72 (s, 1I)  1R (KBr) 3600-2800(br), 1590, 1528, 1503, 1469, 1359, 12  mp 136-178 C  1-1055  1R (KBr) 3600-2800(br), 1611, 1625, 1603, 1469, 1359, 12  IR (KBr) 3600-2800(br), 1611, 1625, 1603, 1469, 1359, 12  IR (KBr) 3600-2800(br), 1611, 1625, 1603, 1469, 1359, 12  1-1056  1-1056  1-1066  1-1066  1-1067  1-1066  1-1067  1-1066  1-1067  1-1067  1-1067  1-1067  1-1068  1-1		
7.39-7.52 IR (CHIC) 939, 835 mp 141-1 111 NMR Hz, 2H), 11.7, 2.1 IR (CHC) 902 cm <sup>-1</sup> mp 138-1 H NMR 7.37-7.47 IR (KBP) mp 176-1 H NMR IR (KBP) mp 134-1 H NMR IR (KBP)		amorphous III NMR (CDCI <sub>3</sub> ) & 2.12 (s, 3H), 3.47 (s, 3H), 5.15 (s, 2H), 5.82-6.08 (m, 3H), 6.70-6.95 (m, 5H), 7.02 (d, J = 8.1 Hz, 1H),
939, 835 mp 141-1 111 NMR Hz, 2H), 11.7, 2-1 IR (CHC 902 cm <sup>-1</sup> mp 138-1 H NMR 7.37-7.47 IR (KBr) mp 176-1 H NMR IR (KBr) mp 134-1 H NMR J = 8.4 H IR (KBr)		7.39-7.52 (m, 711) 1R (CHCL) 3597, 3535, 2937, 1731, 1612, 1589, 1522, 1489, 1455, 1401, 1382, 1328, 1309, 1288, 1173, 1128, 1096, 1011,
mp 141-1 11 NMR 112, 21), 11.7, 2.1 IR (CHC 902 cm <sup>-1</sup> mp 138-1 IR (KBP) mp 176-1 IR (KBP) mp 176-1 IR (KBP) mp 134-1 IR (KBP) mp 134-1 IR (KBP)		939, 835 cm <sup>-1</sup>
11. 211), 11.7, 2.1 IR (CHC 902 cm. <sup>1</sup> III (CHC 902 cm. <sup>2</sup> III NMR 7.37-7.47 IR (KBr)		
HE, 2H), 11.7, 2.1 IR (CHC 902 cm. <sup>1</sup> mp 138-1 IH NMR 7.37-7.47 IR (KBr) mp 176-1 IR (KBr) mp 134-1 IR (KBr) H NMR J = 8.4 H IR (KBr)		
11.7, 2.1  IR (CHC 902 cm <sup>-1</sup> mp 138-1  iH NMR 7.37-7.47  IR (KBr)  mp 176-1  iH NMR 184-1  iH NMR 18 184-1  iH NMR 18 18 18 18 IR KRB-1	1	Hz, 2H), 5.30 (d, J F·H = 3.3 Hz, 1H), 5.57 (m, 1H), 5.88 (s, 1H), 6.45 (s, 1H), 6.99-7.11 (m, 4H), 7.33 (m, 1H), 7.43 (dd, J =
IR (CHC 1902 cm 1 138-1 14 NMR 7.37-7.47 mp 176-1 1R (KBz) mp 176-1 1R (KBz) mp 134-1 mp 134-1 1H NMR J = 8.4 H	6001:1	11.7, 2.1 Hz, 1H)
902 cm <sup>1</sup> mp 138-140 °C H NMR (CIDCl <sub>3</sub> ) δ 7.37-7.47 (m, 511), 7.5 IR (KBr) 3600-2800(b mp 176-178 °C H NMR (CDCl <sub>3</sub> ) δ IR (KBr) 3600-2800(b mp 134-136 °C H NMR (CDCl <sub>3</sub> ) δ J = 8.4 Hz, 1H), 7.44· IR (KRr) 3600-2800(b		IR (CHCl3) 3578, 3514, 1621, 1600, 1583, 1623, 1492, 1464, 1397, 1320, 1279, 1175, 1140, 1116, 1100, 1076, 1038, 1011,
mp 138-140 °C 1H NMR (CI)Cl <sub>3</sub> ) δ 7.37-7.47 (m, 511), 7.5 IR (KBr) 3600-2800(b mp 176-178 °C 1H NMR (CDCl <sub>3</sub> ) δ IR (KBr) 3600-2800(b mp 134-136 °C 1H NMR (CDCl <sub>3</sub> ) δ J = 8.4 Hz, 1H), 7.44- IR (KBr) 3600-2800(b		902 cm <sup>1</sup>
1H NMR (CDCl <sub>3</sub> ) 6 7.37.7.47 (m, 511), 7.5 IR (KBr) 3600-2800(b mp 176-178 °C <sup>1</sup> H NMR (CDCl <sub>3</sub> ) 6 IR (KBr) 3600-2800(b mp 134-136 °C <sup>1</sup> H NMR (CDCl <sub>3</sub> ) 6 J = 8.4 Hz, 1H), 7.44- IR (KBr) 3600-2800(b		40 C
1.37-7.47  IR (KBr)  mp 176-1  H NMR  IR (KBr)  mp 134-1  H NMR  J = 8.4 H		1H NMR (CDCh) 6 5.17 (8, 2H), 5.60 (8, 1H), 5.72 (8, 1H), 6.98-7.02 (m, 2H), 7.10-7.14 (m, 3H), 7.18 (8, 1H), 7.35 (8, 1H),
IR (KBr) mp 176-1 H NMR IR (KBr) mp 134-1 H NMR J = 8.4 H	1-1054	7.37.7.47 (m, 611), 7.69-7.61 (m, 211)
mp 176-1 1H NMR IR (KBr) mp 134-1 1H NMR J = 8.4 H		IR (KBr) 3600.2800(br), 1590, 1528, 1503, 1483, 1454, 1386, 1294, 1254, 1223, 1187, 1132, 1086, 1009 cm.1
1R (KBr) mp 134-1 1H NMR J = 8.4 H		mp 176.178 C
IR (KBr) mp 134-1 iH NMR J = 8.4 H	1.1055	H NMR
mp 134-1 1H NMR J = 8.4 H		IR (KBr) 3600-2800(br), 1611, 1626, 1603, 1469, 1359, 1290, 1244, 1170, 1088, 979 cm.
1H NMR  J = 8.4 H		mp 134-136 C
J = 8.4 H		<sup>1</sup> H NMR (CDCl <sub>3</sub> ) $\delta$ 1.77 (8, 3H), 1.81 (8, 3H), 3.23 (8, 3H), 3.32 (8, 3H), 4.64 (d, $J = 6.9$ Hz, 1H), 5.48-5.54 (m, 1H), 7.10 (d,
IR (KRr) 3600.280006r), 1609, 1527, 1504, 1469, 1351, 12	agar - 1	J = 8.4 Hz, 1H), 7.44·7.55 (m, 4H), 7.58·7.65 (m, 4H)
		IR (KBr) 3600.2800(br), 1609, 1527, 1504, 1469, 1351, 1289, 1277, 1186, 1171, 1115, 1089, 973 cm.

Table 209

1.1057	mp 97-100 °C 111 NMR (CDCB,) \$\delta = 1.77 (d, J = 0.9 Hz, 3H), 1.82 (d, J = 0.9 Hz, 3H), 4.63 (d, J = 7.2 Hz, 2H), 5.50-5.54 (m, 1H), 5.62 (br s, 1H), 5.74 (br s, 1H), 6.95 (d, J = 8.7 Hz, 1H), 7.12 (dd, J = 2.4, 8.7 Hz, 1H), 7.18 (s 1H), 7.24 (d, J = 2.4 Hz, 1H), 7.36 (s, 1H), 7.42-7.46 (m, 2H), 7.58-7.62 (m, 2H)  7.42-7.46 (m, 2H), 7.58-7.62 (m, 2H)  18. 18. 18. 18. 18. 18. 18. 18. 18. 18.
1.1058	
1.1059	mp 122-123 °C. 111 NMR (CDCh) \$\delta\$ 1.74 (d, J = 0.6 Hz, 3H), 1.78 (d, J = 0.6 Hz, 3H), 2.26 (e, 3H), 2.29 (e, 3H), 3.77 (d, J = 6.9 Hz, 2H), 4.83 (br, 1H), 5.36-5.41 (m, 1H), 6.61-6.77 (m, 1H), 6.86-6.91 (m, 2H), 6.99-7.04 (m, 2H), 7.10 (e, 1H), 7.11 (e 1H), 7.21-7.26 (m, 2H)  (m, 2H) 1R (KBr) 3600-2800(br), 1626, 1608, 1526, 1489, 1428, 1336, 1300, 1252, 1209, 1187 cm <sup>-1</sup>
1.1060	mp foam 111 NMR (CDCl <sub>3</sub> ) δ 1.74 (s, 3H), 1.77 (s, 3H), 2.27 (s, 3H), 2.31 (s, 3H), 3.76 (d, J = 6.6 Hz, 2H), 3.86 (s, 3H), 5.38-5.43 (m, 1H), 6.66 (d, J = 8.1 Hz, 1H), 6.80 (d, J = 1.8 Hz, 1H), 6.86·6.90 (m, 3H), 7.11 (s, 1H), 7.16 (s 1H), 7.23-7.26 (m, 2H) 111 (CHCl <sub>3</sub> ) 3600-2800(br), 1730, 1611, 1525, 1489, 1455, 1256, 1171, 1137, 1100, 1036 cm <sup>-1</sup>
1.1061	mp 191-193 °C <sup>1</sup> HI NMR (CDCl <sub>3</sub> ) δ 3.01 (s, 6H), 3.79 (s, 3H), 3.80 (s, 3H), 6.79-6.83 (m, 2H), 6.92 (s, 1H), 6.98 (s 1H), 7.41-7.51 (m, 4H), 8.12 (br s, 1H), 8.26-8.32 (m, 1H) 1R (KBr) 3600-2800(br), 1712, 1617, 1600, 1536, 1494, 1460, 1446, 1385, 1364, 1290, 1212, 1162, 1057, 1035 cm <sup>-1</sup>

Table 210

1.1062 1H HI HI 1.1063 7.1	my 200 2 m 200
1H 1-1063 7.5	11 NMR (CDCE) 0 3.82 (8, 611), 6.95 (8, 211), 1.41-1.43 (m, 411), 6.15 (01 8, 211), 6.25-6.55 (m, 111)
H1 1.1063 7.5	IR (Klhr) 3600-2800(br), 1725, 1598, 1544, 1492, 1381, 1294, 1215, 1197, 1165, 1109, 1055, 1033 cm <sup>-1</sup>
1.1063 7.5	1H NMR (CDCl3) & 1.99 (8, 6H), 2.17 (8, 3H), 3.21 (6, 3H), 6.20 (8, 2H), 6.96 · 7.11 (m, 4H), 7.23 (d, J = 8.7 Hz, 2H), 7.33 ·
	I-1063 7.52 (m, 711)
2	IR (KIR) 1617, 1513, 1366, 1295, 1267, 1198, 1173, 1149, 1127, 1106cm <sup>-1</sup>
11.	111 NMR (CDCL3) $\delta$ 1.99 (s, 6H), 2.17 (s, 3H), 3.21 (s, 3H), 5.18 (d, $J=3.9$ Hz, 1H), 6.97 · 7.10 (m, 4H), 7.23 (d, $J=8.7$ Hz,
1.1064 21	1.1064 211), 7.37 (d, $J = 8.7$ Hz, 2H)
HE IR	IR (KBr) 3442, 1620, 1597, 1519, 1472, 1356, 1279, 1232, 1174, 1147, 1103cm <sup>-1</sup>
=	III NMR (CDCI <sub>3</sub> ) & 1.78 (8, 3H), 1.83 (8, 3H), 2.00 (8, 6H), 2.19 (8,3H), 3.22 (8, 3H), 4.65 (d, J = 6.3Hz, 2H), 5.52-5.62 (m,
11 6901-1	1.1065   111), 6.96-7.13 (m, 411), 7.24 (d, J = 8.711z, 2H), 7.38 (d, J= 8.7 Hz, 2H)
	IR (KBr)1617, 1576, 1514, 1466, 1359, 1297, 1268, 1204, 1151, 1002cm <sup>-1</sup>
H	14 NMR (CDCl3) & 1.77 (8, 3H), 1.81 (8, 3H), 2.01 (8, 6H), 2.18 (8, 3H), 4.63 (d, J = 6.9 Hz, 2H), 4.76 (8, 1H), 5.52 · 5.60 (m,
1-1066 111), 6.82 -	(I), 6.82 · 7.11 (m, 811)
<u> </u>	IR (KBr) 3433, 1606, 1517, 1466, 1297, 1269, 1221, 1128, 1107, 1004cm <sup>-1</sup>
Hı	14 NMR (CDCl3) 6:2.25 (s, 3H), 2.27 (s, 3H), 2.31 (s, 3H), 3.20 (s, 3H), 4.75 (s, 1 H), 6.83 (d, J= 8.4 Hz, 1H), 7.05
1.1067 7.1	1.1067 7.14 (m, 4H), 7.34 (d, $J = 8.4$ Hz, 2H), 7.42 (d, $J = 8.4$ Hz, 2H)
=	IR (KBr)3494,3435, 1604, 1517, 1488, 1375, 1327, 1199, 1171, 1148, 1118 cm <sup>-1</sup>
II.	111 NMIR (CIUCIS) $\delta$ 1.77 (s, 3H), 1.82 (s, 3H), 2.25 (s, 3H), 2.28 (s, 6H), 3.20 (s, 3H), 4.58 (d, $J = 6.6$ Hz, 2H), 5.50 · 5.58
I-1068 (m	1.1068 (m, 1H), 6.88 (d, $J = 9.0 \text{ Hz}$ , 1H), 7.08 - 7.16 (m, 4H), 7.34 (d, $J = 8.7 \text{ Hz}$ , 2H), 742 (d, $J = 8.7 \text{ Hz}$ , 2H)
IR	IR (KBr) 1604, 1513, 1486, 1367, 1238, 1176, 1163, 1131, 1002 cm <sup>-1</sup>

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Table 211

	111 NMR (CDCla) & 1.76 (s, 311), 1.81 (s, 311), 2.26 (s, 311), 2.28 (s, 611), 4.57 (d, J = 6.6Hz, 2H), 4.80 (s, 1H), 5.50 - 5.58
1.1069	1-1069 (m, 111), 6.85 · 6.91 (m, 311), 7.09 · 7.17 (m, 311), 7.21 · 7.28 (m, 311)
	IR (KBr) 3436, 1608, 1518, 1488, 1238, 1130, 1008 cm <sup>-1</sup>
	111 NMR (CDCIA) $\delta$ : 2.26 (8, 311), 2.30 (8, 311), 3.00 (8, 611), 5.19 (8, 211), 6.80 (.d, J = 8.7 Hz, 211), 7.02 - 7.16 (m, 511), 7.26
1.1070	$1.1070 \mid (d, J = 8.7 \text{ Hz}, 2\text{H}), 7.33 \cdot 7.51 \text{ (m, 5H)}$
	IR (KBr) 1608, 1527, 1490, 1355, 1297, 1270, 1262, 1231, 1121, 1022 cm <sup>-1</sup>
	111 NMR (CDCl <sub>3</sub> ) & 2.26 (s, 3H), 2.30 (s, 3H), 3.01 (s, 6H), 5.09 (s, 1H), 6.80 (d, J = 8.4 Hz, 2H), 7.01 · 7.16(m, 6H), 7.27 (.d.
1.1071	1.1071 $J = 8.4$ Hz, 2H)
	IR (KBr) 3432, 1613, 1590, 1526, 1489, 1307, 1283, 1241, 1138, 1111 cm-1
	1H NMR (CDCl.) 6:1.77 (8, 3H), 1.81 (8, 3H), 2.27 (8, 3H), 2.30 (8, 3H), 3.00 (8, 6H), 4.63 (d, J=6.6 Hz, 2H), 5.51-5.59 (m,
1-1072	1H), 6.80 (d, J=8.4 Hz, 2H), 6.97-7.16 (m, 5H), 7.27 (d, J=8.14 Hz, 2H)
	IR (KBr) 1611, 1528, 1489, 1353, 1297, 1266, 1228, 1122, 1011 cm <sup>-1</sup>
	mp 182-184 C
	111 NMR (CDCl <sub>3</sub> ) 6 1.48 (8, 3H), 1.67 (8, 3H), 1.91 (6, 3H), 3.46 (8, 3H), 3.76 (6, 3H), 3.84 (8, 3H), 3.94-4.03 (m, 1H), 4.05-
1.1073	1-1073   4.59 (m, 1H), 5.23-5.32 (m, 1H), 5.74 (br s, 1H), 6.05 (s, 1H), 6.48 (s, 1H), 6.93-6.99 (m, 2H), 7.04-7.10 (m, 3H), 7.51-7.56 (m,
	3H)
	IR (KBr) 3400, 2934, 1625, 1523, 1396, 1227, 1119, 1077, 1036, 826, 589 cm <sup>-1</sup>
	mp 153-154 C
1,1074	<sup>1</sup> H NMR (CDCl <sub>3</sub> ) $\delta$ 1.74 (8, 3H), 1.78 (8, 3H), 2.30 (8, 3H), 2.31 (8, 3H), 3.75 (d, $J = 6.6$ Hz, 2H), 3.86 (8, 3H), 3.87 (8, 3H),
	5.37-5.46 (m, 1H), 6.66 (d, J = 8.4 Hz, 1H), 6.74-6.83 (m, 6H), 6.89 (dd, J = 1.8, 8.1 Hz, 1H), 7.14 (s, 1H), 7.16 (s, 1H)
	IR (KBr) 3408, 3389, 3294, 3210, 2919, 2835, 1628, 1495, 1275, 1208, 1032, 856, 826 cm <sup>-1</sup>

Table 212

	mp 168-171 ℃
	11 NMR (CDCl3) $\delta$ 1.74 (s, 6H), 1.77 (s, 6H), 2.31 (s, 6H), 3.75 (d, J = 6.9 Hz, 4H), 3.86 (s, 6H), 5.37-5.45 (m, 2H), 6.66 (d, H)
1.1075	.) = 8.1 Hz, 2H), 6.80 (d, J = 1.8 Hz, 2H), 6.89 (dd, J = 1.8, 8.1 Hz, 2H), 7.16 (s, 1H)
	IR (KBr) 3423, 2968, 2927, 2912, 2849, 1609, 1626, 1498, 1464, 1261, 1209, 1135, 1030, 865, 803 cm <sup>-1</sup>
	ა იგანები ეგი ეგი ეგი ეგი ეგი ეგი ეგი ეგი ეგი ეგ
	11 NMR (CDCh) 3 -2.54 (8, 3H), 3.19 (8, 3H), 3.85 (8, 3H), 6.17 (8, 2H), 5.71 (brs, 1H), 6.93 (d, J = 8.1 Hz, 1H), 7.01-7.07
1.1076	(m, 3H), 7.24-7.26 (m, 2H), 7.37-7.43 (m, 7H), 7.66 (d, J = 8.7 Hz, 2H)
	IR(KBr) 3466, 3029, 2939, 2937, 1610, 1520, 1482, 1365, 1246, 1201, 1175, 1150, 1073, 969, 872, 839, 804 cm.
	mp151-152 C
	111 NMR (CDCh) $\delta$ 4.00 (s, 3H), 4.91 (brs, 1H), 5.24 (s, 2H), 6.89 (d, J = 8.2 Hz, 2H), 7.00 (d, J = 8.0 Hz, 1H), 7.12-7.47 (m,
1-1077	
	IR(KBr) 3422, 1612, 1526, 1491, 1454, 1329, 1287, 1269, 1248, 1171, 1136, 1103, 1019, 827 cm <sup>-1</sup>
	mp173-174 C
į	111 NMR (CDCE) 6 3.13 (s, 311), 4.92 (brs, 111), 6.19 (s, 211), 6.88 (d, J = 8.6 Hz, 2H), 7.16-7.26 (m, 4H), 7.36-7.69 (m, 7H),
1.1078	7.69 (d, J = 9.4 Hz, 1H), 7.86 (s, 1H)
	IR(KBr) 3426, 1613, 1527, 1489, 1435, 1361, 1330, 1294, 1243, 1164, 1118, 1070, 978, 821 cm <sup>-1</sup>
	mp168-169 °C
	1H NMR (CDC13) & 3.20 (s, 3H), 3.99 (s, 3H), 5.22 (s, 2H), 6.89 (d, J = 8.8 Hz, 1H), 7.11-7.15 (m, 2H), 7.31-7.49 (m, 10H),
6/0I-I	7.73 (d, J = 7.4 Hz, 1H), 7.90 (s, 1H)
	IR(KBr) 3434, 1603, 1524, 1488, 1369, 1335, 1244, 1178, 1143, 1119, 1006, 871 cm. <sup>1</sup>

Table 213

1-1080	mp68-69 °C 1H NMR (CDCEs) & 3.13 (s, 3H), 3.19 (в, 3H), 5.19 (s, 2H), 7.18 (d, J = 8.6 Hz, 2H), 7.26-7.59 (m, 11H), 7.73 (d, J = 9.2 Hz, 1H), 7.89 (s, 1H)
	IR(KBr) 3431, 3034, 2938, 1613, 1524, 1487, 1367, 1330, 1293, 1242, 1175, 1161, 1118, 970, 872, 828 cm·l
	inp74.76 ℃
1901	111 NMR (CDCl3) $\delta$ 1.78 (8, 311), 1.84 (8, 311), 3.51 (8, 311), 4.64 (d, $J = 5.6$ Hz, 211), 5.08 (brs, 214), 5.49-5.54 (m, 111), 5.75
	(brs, 111), 5.85 (brs, 111), 6.14 (g, 111), 6.89-7.12 (m, 511), 7.53 (d, $J = 8.4 \text{ Hz}$ , 2H)
	IR(KBr) 3444, 2934, 1612, 1523, 1485, 1403, 1360, 1251, 1172, 1006, 971, 837, 527 cm <sup>-1</sup>
	mp71.72 °C
_	111 NMR (CDCI.) 6 2.46 (e, 3H), 3.20 (e, 3H), 3.86 (e, 3H), 3.91 (e, 3H), 5.21 (e, 2H), 6.87-7.03 (m, 3H), 7.11 (e, 1H), 7.24-
1-1082	7.41  (m, 8H), 7.67  (d,  J = 8.8  Hz,  2H)
	IR(KBr) 3434, 3028, 2936, 1609, 1521, 1482, 1365, 1239, 1176, 1074, 969, 869, 804 cm.
	mp73.74 C
	111 NMR (CDC3.) $\delta$ .2.66 (8, 311), 3.13 (8, 311), 3.20 (8, 311), 3.86 (6, 311), 5.19 (8, 211), 7.08 (d, $J = 1.6  \mathrm{Hz}$ , 111), 7.16 (d, $J = 8.4  \mathrm{Hz}$
1.1083	$H_{2}$ , 1H), 7.21-7.28 (m, 2H), 7.37-7.42 (m, 8H), 7.66 (d, $J = 8.4 \text{ Hz}$ , 2H)
	IR(KBr) 3432, 3031, 2938, 1610, 1523, 1480, 1365, 1176, 1161, 1074, 970, 875, 807, 524 cm <sup>-1</sup>
	mp110-111 C
	<sup>1</sup> H NMR (CDCl <sub>3</sub> ) δ 1.78 (9, 3H), 1.81 (8, 3H), 3.21 (8, 3H), 3.98 (8, 3H), 4.67 (d, J = 6.6 Hz, 2H), 5.67 (t, J = 6.8 Hz, 1H),
1-1054	7.01 (d, J = 8.0 Hz, 1H), 7.15-7.21 (m, 2H), 7.28-7.45 (m, 4H), 7.76 (d, J = 7.6 Hz, 1H), 7.93 (s, 1H), 8.03 (s, 1H)
	IR(KBr) 3434, 3010, 2931, 1524, 1488, 1368, 1336, 1247, 1173, 1149, 1121, 1007, 871, 562 cm <sup>-1</sup>

Table 214

	mp147.148 C
	111 NMR (CDCE) 6 1.76 (8, 311), 1.79 (8, 311), 3.96 (8, 311), 4.65 (d, J = 6.3 Hz, 211), 4.91 (brs, 1H), 5.55 (t, J = 5.7 Hz, 1H),
1-1085	6.88 (d, J = 8.1 Hz, 2H), 6.99 (d, J = 8.4 Hz, 1H), 7.12-7.26 (m, 4H), 7.36 (d, J = 8.1 Hz, 1H), 7.89 (s, 1H)
	IR(KBr) 3450, 2938, 1612, 1524, 1490, 1436, 1340, 1264, 1230, 1212, 1139, 1123, 984, 835 cm <sup>-1</sup>
	mp134-135 C
	111 NMR (CDCM) $\delta$ 1.77 (s, 311), 1.82 (s, 311), 4.64 (d, J = 6.6 11z, 2H), 4.84 (brs, 1H), 5.52 (t, J = 7.2 Hz, 1H), 5.77 (s, 1H),
1-1086	$  0.086 =   0.87 \text{ (d, J} = 8.7 \text{ Hz, 2H), }   0.96 \text{ (d, J} = 8.4 \text{ Hz, 1H), }   7.12 \text{ (dd, J} = 2.4, 8.7 \text{ Hz, 1H), }   7.35 \text{ (d, J} = 8.1 \text{ Hz, 1H), }   7.70 \text{ (d, J} = 8.4 \text{ Hz, }   7.70 \text{ (d, J} = 8.4 \text$
	111), 7.89 (8, 111)
	IR(KBr) 3367, 1610, 1489, 1442, 1333, 1265, 1193, 1165, 1124, 834, 805 cm <sup>-1</sup>
	mp156-157 C
	1H NMR (CDCL3) & 1.78 (s, 3H), 1.81 (s, 3H), 3.82 (s, 3H), 3.89 (s, 3H), 4.65 (d, J = 6.2 Hz, 2H), 4.95 (brs, 1H), 5.22 (brs.
1.1087	11H), 5.58 (t, J = 6.0 Hz, 1H), 6.73 (8, 1H), 6.87-7.00 (m, 6H), 7.53 (d, J = 8.4 Hz, 2H)
	IR(KHr) 3:394, 2934, 1610, 1526, 1499, 1455, 1402, 1240, 1221, 1139, 1099, 894, 815 cm <sup>-1</sup>
	mp69-70 °C
,	=
1.1088	= 7.0 Hz, 1H), 5.78 (bre, 1H), 6.70 (d, J = 1.6 Hz, 1H), 6.83-7.01 (m, 6H), 7.51 (d, J = 8.8 Hz, 2H)
	IR(KIR) 3411, 2933, 1611, 1526, 1492, 1453, 1263, 1242, 1220, 1190, 1172, 1096, 907, 822 cm <sup>-1</sup>
	mp 160-161 °C
	<sup>1</sup> H NMR (CDCl <sub>3</sub> ) $\delta$ 1.39 (d, J = 6.0 Hz, 6H), 2.40 (8, 3H), 3.21 (6, 3H), 3.55 (8, 3H), 3.77 (6, 3H), 4.55 (m, 1H), 5.20 (6, 2H),
1.1089	1-1089 6.83 (s, 111), 6.93 (dd, J = 1.8, 8.1 Hz, 1H), 7.01 (d, J = 8.1 Hz, 1H), 7.01 (d, J = 1.8 Hz, 1H), 7.28-7.48 (m, 7H), 7.66-7.72 (m,
	2H)
	IR (KBr) 1515, 1480, 1463, 1391, 1363, 1239, 1192, 1176, 1149, 1082, 1018, 962, 873, 800 cm.1

Table 215

50	mp 154-155 C	2.59 (s, 3II),	32 (8, 311), 3	30 St. 311), 3.7	<sup>52</sup> 77 (8, 311), 5.23	(8, 211), 6.84 (	15 (H), 7.06	2 5 5 5 5 5 6, 3H), 3.21 (a, 3H), 3.77 (a, 3H), 5.23 (a, 2H), 6.84 (a, 1H), 7.06 (d, J = 8.4 Hz, 1H),	5 🚊
	7.24-7.50 (m 1R (KBr) 15 mp 137-138 H NMR (Cl	. 1365, 1267, 1 1.38 (d, J = 6.	H) 1232, 1178, 11 3 Hz, 611), 3.4	60, 1079, 971, 16 (a, 3H), 3.74	959, 875, 797 с (в, 3H), 4.64 (г	m <sup>-1</sup> n, 1H), 4.96 (8	в) 11.9), 6.17 (в	1.9 H), 7.65-7.71 (m, 2H) 13. 1479, 1365, 1267, 1232, 1178, 1150, 1079, 971, 959, 875, 797 cm <sup>-1</sup> τ τ τ τ τ τ τ τ τ τ τ τ τ τ τ τ τ τ τ	£
601		1611, 1521, 1	0-7.11 (m, 31f, 1488, 1458, 13	), 7.27-7.41 (m <sub>.</sub> 93, 1269, 1236	6.89-6.94 (m, 211), 7.00-7.11 (m, 311), 7.27-7.41 (m, 311), 7.45-7.56 (m, 4H) 13, 3356, 1611, 1521, 1488, 1458, 1393, 1269, 1236, 1138, 1112, 1074, 1011	(m, 4H) <u>774, 1013, 83C</u>	, 743 cm <sup>-1</sup>		
[.1092	<sup>1</sup> H NMR (CDCL <sub>3</sub> ) δ 1.37 (d, J = 5.8 Hz, 6H), 1.75 (s, 3H), 1.79 (s, 3H), 2.53 (s, 3H), 3.21 (s, 3H), 3.56 (s, 3H), 3.78 (s, 3H), 4.51 (m, 1H), 4.61 (d, J = 6.6 Hz, 2H), 5.52 (m, 1H), 6.84 (s, 1H), 6.96-7.02 (m, 3H), 7.34-7.42 (m, 2H), 7.65-7.74 (m, 2H) IR (KBr) 1516, 1480, 1449, 1360, 1332, 1240, 1199, 1177, 1152, 1083, 964, 873, 797 cm <sup>-1</sup>	1.37 (d, J = 5 J = 6.6 Hz, 21 1449, 1360, 1	5.8 Hz, 6H), 1. H), 5.52 (m, 11 332, 1240, 111	75 (s, 3H), 1.7£ H), 6.84 (s, 1H) 99, 1177, 1152,	DCh)	8, 3H), 3.21 (ε 3H), 7.34-7.4; 3, 797 cm <sup>-1</sup>	, 3H), 3.56 (8 2 (m, 2H), 7.6	, 3H), 3.78 (s, 3 55-7.74 (m, 2H)	Ĥ
1.1093	mp 119-120 °C 111 NMR (CDCl <sub>3</sub> ) δ 1.37 (d, J = 6.3 Hz, 6H), 1.73 (s, 3H), 1.77 (d, J = 0.9 Hz, 3H), 3.46 (s, 3H), 3.76 (s, 3H), 4.51 (m, 1H), 4.61 (d, J = 6.6 Hz, 2H), 5.14 (s, 1H), 5.54 (m, 1H), 5.93 (s, 1H), 6.46 (s, 1H), 6.89-6.95 (m, 2H), 6.98 (d, J = 8.1 Hz, 1H), 7.01-7.07 (m, 2H), 7.50-7.56 (m, 2H) IR (KBr) 3426, 1610, 1522, 1488, 1455, 1402, 1267, 1237, 1174, 1135, 1112, 1079, 1020 cm <sup>-1</sup>	1.37 (d, J = 6 2H), 5.14 (s, 1 50-7.56 (m, 2H	i.3 Hz, 6H), 1.' H), 5.54 (m, 1 H)	73 (s, 3H), 1.77 H), 5.93 (s, 1H 37, 1237, 1174,	f (d, J = 0.9 Hz f), 6.46 (s, 1H)	, 3H), 3.46 (в, , 6.89-6.95 (m <u>79, 1020 cm</u> -1	3H), 3.75 (e,	3H), 4.51 (m, 1 1, J = 8.1 Hz, 1	£ £
1.1094	mp 150-151 °C <sup>1</sup> H NMR (CI)Cl <sub>3</sub> ) δ J = 8.4 Hz, 1H), 7.29. IR (KBr) 3410, 1610,	C(1 <sub>3</sub> )	3.75 (s, 3H), 4.: 7.47.7.56 (m, 463, 1455, 141	90 (s, 1H), 5.20 5H) 10, 1382, 1359,	C(13) & 3.44 (s, 3H), 3.75 (s, 3H), 4.90 (s, 1H), 5.20 (s, 2H), 5.99 (s, 1H), 6.44 (s, 1H), 6.88-6.95 (m, 2H), H), 7.29-7.44 (m, 4H), 7.47-7.56 (m, 5H)  10, 1610, 1519, 1484, 1463, 1455, 1410, 1382, 1359, 1285, 1264, 1229, 1118, 1074, 1060, 1014, 995 cm. 1	, 1H), 6.44 (s, 29, 1118, 107	1H), 6.88-6.9	C )C(1 <sub>3</sub> ) & 3.44 (8, 3H), 3.75 (8, 3H), 4.90 (8, 1H), 5.20 (6, 2H), 5.99 (8, 1H), 6.44 (8, 1H), 6.88-6.95 (m, 2H), 7.04 (d, 1H), 7.29-7.44 (m, 4H), 7.47-7.56 (m, 5H) 10, 1610, 1519, 1484, 1463, 1455, 1410, 1382, 1359, 1285, 1264, 1229, 1118, 1074, 1060, 1014, 995 cm. <sup>1</sup>	Ġ,
1.1095	<sup>1</sup> H NMR (CDCl <sub>3</sub> ) δ 0.96 (e, 3H), 0.98 (e, 3H), 1.53-1.82 (m, 3H), 2.99 (e, 6H), 3.20 (t, J = 7.2 Hz, 3H), 3.87 (br, 1H), 6.71-6.83 (m, 3H), 6.92 (e, 1H), 6.94 (e 1H), 7.23-7.31 (m, 2H), 7.47-7.52 (m, 2H)	0.96 (s, 3H), 71-6.83 (m, 3H	0.98 (s, 3H), 1 1), 6.92 (s, 1H)	1.53-1.82 (m, 3) 1, 6.94 (s 1H), 7	H), 2.99 (s, 6H)	J. 7.47-7.52 (1)	2 Hz, 2H), 3. n, 2H)	0.96 (s, 3H), 0.98 (s, 3H), 1.53-1.82 (m, 3H), 2.99 (s, 6H), 3.20 (t, J = 7.2 Hz, 2H), 3.78 (s, 3H), 3.79 (s, 1-6.83 (m, 3H), 6.92 (s, 1H), 6.94 (s 1H), 7.23-7.31 (m, 2H), 7.47-7.52 (m, 2H)	œ̂.

Table 216

	mp 87.89 °C
,	
1.1096	5.34 (m, 111), 6.79-6.83 (m, 211), 6.92-6.97 (m, 3H), 7.26-7.34 (m, 2H), 7.47-7.52 (m, 2H)
	IR (KBr) 3600-2800(br), 1613, 1631, 1495, 1460, 1448, 1380, 1359, 1253, 1210, 1057, 1036 cm <sup>-1</sup>
	1H NMR (CDCL) & 2.92 (8, 3H), 3.00 (8, 6H), 3.78 (8, 3H), 3.79 (8, 3H), 4.02 (br, 1H), 6.71-6.83 (m, 3H), 6.92 (8, 1H), 6.95
1.1097	(s, 111), 7.25-7.32 (m, 211), 7.47-7.52 (m, 211)
	IR (KBr) 3600-2800(br), 1625, 1613, 1533, 1497, 1462, 1445, 1381, 1358, 1328, 1262, 1205, 1163, 1051, 1031 cm <sup>-1</sup>
	mp 114-115 ℃
1.1098	1.1098   41 NMR (CDCII) 6 2.27 (8, 6H), 2.54 (8, 3H), 5.19 (8, 2H), 7.00-7.16 (m, 5H), 7.26-7.51 (m, 9H)
	IR (KBr) 1519, 1501, 1483, 1454, 1310, 1295, 1263, 1232, 1123, 998, 744 cm.
	mp 68-69 C
	111 NMR (CDCh) 6 1.62 (br s, 111), 1.77 (s, 311), 1.82 (s, 311), 2.27 (s, 311), 2.28 (s, 311), 4.64 (d, J = 6.8 Hz, 211), 4.76 (s,
6601.1	211), 5.56 (m, 111), 7.00-7.16 (m, 511), 7.33-7.48 (m, 411)
	IR (KBr) 3433, 1522, 1490, 1384, 1311, 1296, 1266, 1232, 1194, 1122, 1025, 1013, 992, 841, 818 cm.1
	mp 68-69 °C
	14 NMR (CDCl3) 6 1.62 (br s, 1H), 1.77 (s, 3H), 1.82 (s, 3H), 2.27 (s, 3H), 2.28 (s, 3H), 4.64 (d, J = 6.8 Hz, 2H), 4.76 (s,
0011-1	2H), 5.56 (m, 1H), 7.00-7.16 (m, 5H), 7.33-7.48 (m, 4H)
	1R (KBr) 3433, 1522, 1490, 1384, 1311, 1296, 1266, 1232, 1194, 1122, 1025, 1013, 992, 841, 818 cm.

Table 217

	mp 171 °C
	111 NMR (CDCE) & 1.77 (s, 311), 1.81 (d, J = 0.9 Hz, 311), 2.68 (s, 3H), 3.21 (s, 3H), 3.55 (s, 3H), 3.78 (s, 3H), 4.65 (d, J = 6.6
1011-1	1-1101 11z, 211), 5.53 (m, 111), 6.84 (s, 111), 7.03 (d, J = 8.7 Hz, 111), 7.29 (dd, J = 2.1, 8.7 Hz, 111), 7.36-7.41 (m, 2H), 7.46 (d, J = 2.1, 8.7 Hz, 111), 7.47 (d, J = 2.1, 8.7 Hz, 111), 7.48 (d, J = 2.1, 8.7 Hz, 111), 7.4
	Hz, 1H), 7.66-7.72 (m, 2H)
	1R (KBr) 1510, 1477, 1376, 1358, 1349, 1294, 1237, 1196, 1173, 1145, 1077, 1004, 958, 861, 801 cm <sup>-1</sup>
	mp 168-169 C
	111 NMR (CDC3,) 6 1.76 (d, J = 0.3 Hz, 3H), 1.80 (d, J = 0.9 Hz, 3H), 3.44 (s, 3H), 3.76 (s, 3H), 4.64 (d, J = 6.6 Hz, 2H), 4.97
1.1102	1.1102 (9, 111), 5.55 (m, 1H), 6.00 (8, 1H), 6.45 (8, 1H), 6.89-6.95 (m, 2H), 7.01 (d, J = 8.4 Hz, 1H), 7.33 (dd, J = 2.1, 8.4 Hz, 1H), 7.51
	(d, J = 2.1 Hz, 1H), 7.51·7.56 (m, 2H)
	IR (KBr) 3396, 1613, 1521, 1485, 1467, 1440, 1408, 1384, 1357, 1286, 1264, 1229, 1116, 1076, 1066, 993, 834 cm <sup>-1</sup>
	mp 176-177 C
	'HI NMR (CDCl <sub>3</sub> ) δ 1.77 (8, 3H), 1.80 (8, 3H), 2.09 (8, 3H), 2.16 (8, 3H), 3.87 (8, 3H), 4.65 (d, J=7.2 Hz, 2H), 4.78 (hr 8, 1H),
1.1103	5.06 (a, 1H), 5.40-5.60 (m.1H), 6.76 (a, 1H), 6.82-6.91 (m, 4H), 7.02 (d, J = 7.8 Hz, 1H), 7.22-7.27 (m, 2H)
	IR (CHCl.) 3597, 3533, 3026, 3010, 2921, 1731, 1612, 1520, 1488, 1240, 1172 cm <sup>-1</sup>
	mp 185.18G ℃
3	'HI NMR (CDCL <sub>3</sub> ) & 1.78 (s, 3H), 1.82 (s, 3H), 2.06 (s, 3H), 2.15 (s, 3H), 4.66 (d, J=6.9 Hz, 2H), 4.71 (s, 1H), 4.89 (s, 1H),
1.1104	5.53-5.58 (m, 1H), 6.75 (s, 1H), 6.86-6.91 (m, 2H), 6.90-7.00 (m, 3H), 7.21-7.26 (m, 2H)
	IR (CHCl <sub>3</sub> ) 3691, 3598, 3546, 3068, 2922, 1674, 1613, 1520, 1488, 1298, 1262, 1165 cm <sup>-1</sup>
	mp 143-144 C
1.00	111 NMR (CDCl <sub>3</sub> ) 6 2.48 (a, 3H), 3.21 (a, 3H), 3.52 (a, 3H), 3.67 (d, J = 1.2 Hz, 3H), 3.92 (a, 3H), 5.23 (a, 2H), 6.92-7.02 (m,
cor i -i	3H), 7.31-7.48 (m, 7H), 7.60 (dd, J = 8.7, 1.5 Hz, 2H)
	IR (KBr) 1519, 1470, 1370, 1256, 1173, 1152, 1029, 872 cm·l

Table 218

	mp 128-130 °C 176 (8, 311), 1.80 (8, 311), 2.59 (8, 311), 3.21 (8, 311), 3.53 (8, 311), 3.67 (4, J = 0.9 Hz, 311), 3.90 (8, 311),
1.1106	4.64 (d, J = 6.9 Hz, 2H), 5.55 (t, J = 6.9 Hz, 1H), 6.97-7.00 (m, 3H), 7.41 (d, J = 8.8 Hz, 2H), 7.60 (dd, J = 8.8, 1.1 Hz, 2H)
	IR (KBr) 1519, 1361, 1258, 1175, 1148, 1041, 978, 874 cm.1
	H NMR (CDCh) $\delta$ 1.76 (8, 3H), 1.79 (8, 3H), 3.43 (8, 3H), 3.63 (d, $J=0.9$ Hz, 3H), 3.89 (8, 3H), 4.65 (d, $J=6.8$ Hz, 2H).
1.117	5.01 (8, 111), 5.57 (t, J = 6.8 Hz, 111), 5.65 (8, 111), 6.90-7.06 (m, 511), 7.43 (dd, J = 8.7, 1.5 Hz, 211)
	IR (KBr) 3433, 1523, 1464, 1397, 1253, 1216, 1038, 977, 838, 814 cm <sup>-1</sup>
	mp 127-128 C
1	1H NMR (CDCl <sub>3</sub> ) 5 2.25 (s, 3H), 2.27 (s, 3H), 3.20 (s, 3H), 5.22 (s, 2H), 7.02 (d, J = 8.4 Hz, 1H), 7.10 (s, 1H), 7.11 (s, 1H),
1-1108	7.18 (dd, J = 2.1, 8.4 Hz, 1H), 7.31·7.54 (m, 10H)
	IR (KBr) 1513, 1484, 1369, 1284, 1243, 1175, 1150, 1061, 984, 968, 868, 847, 791, 718 cm.1
	mp 161-162 C
	"H NMR (CDCL:) 6 2.26 (8, 3H), 2.28 (8, 3H), 5.16 (8, 2H), 5.19 (8, 2H), 5.70 (br 8, 1H), 6.82 (dd, J = 2.1, 8.4 Hz, 1H), 6.96-
1.1109	7.16 (m, 7H), 7.31-7.51 (m, 10H)
	IR (KBr) 3449, 1521, 1492, 1470, 1455, 1394, 1294, 1279, 1247, 1232, 1199, 1185, 1129, 1013, 740, 695 cm.1
	mp 133-134 C
	1H NMR (CDCl <sub>3</sub> ) δ 2.26 (s, 6H), 4.80 (br s, 1H), 5.21 (s, 2H), 6.85-6.93 (m, 2H), 7.02 (d, J = 8.4 Hz, 1H), 7.09 (s, 1H), 7.11
011:1	(s, 1H), 7.15-7.52 (m, 9H)
	IR (KBr) 3350, 1601, 1619, 1485, 1453, 1387, 1289, 1255, 1169, 1060, 839, 813, 731 cm <sup>-1</sup>

Table 219

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	٠.								
	mp 83-84 °C 111 NMR (CDCLa)	δ 1.78 (d, J =	0.3 Hz, 3H), 1.	.82 (d, J = 0.9	Hz, 3H), 2.26	(s, 3H), 2.27 (	8, 3H), 3.20 (8,	). (1)(:1,1)	6.6
===	1-1111   Hz, 2H), 5.55 (m, 1H), 6.99 (d, J = 8.4 Hz, 1H), 7.11 (s, 1H), 7.12 (s, 1H), 7.19 (dd, J = 2.1, 8.4 Hz, 1H), 7.38 (d, J = 2.1 Hz, 1H), 7.32-7.43 (m, 4H)	1H), 6.99 (d, J 4H)	= 8.4 Hz, 1II),	7.11 (s, 1H),	7.12 (s, 1H), 7	'.19 (dd, J = 2.	1, 8.4 Hz, 1H)	, 7.38 (d, J = 2.1	Hz,
	IR (KBr) 1514, 1485, 1364, 1286, 1253, 1197, 1178, 1166, 1057, 976, 882, 851 cm <sup>-1</sup> nm 86-87 °C	85, 1364, 1286,	1253, 1197, 1	178, 1156, 10	57, 976, 882, 8	35 l cm·l			
	III NMR (CDCL <sub>3</sub> )	8 1.77 (d, J = (	0.6 Hz, 3H), 1.4	82 (d, J = 0.9	Hz, 3H), 2.27	(s, 6H), 4.65 (d	i, J = 6.6 Hz, 2	H), 5.00 (s, 1H),	99.
11112	1-1112 (m, 111), 6.86-6.92 (m, 211), 6.98 (d, J = 8.4 Hz, 111), 7.10 (s, 111), 7.11 (s, 111), 7.20 (dd, J = 2.1, 8.4 Hz, 111), 7.22-7.26 (m,	? (m, 2H), 6.98 (	(d, J = 8.4 Hz,	111), 7.10 (8,	1H), 7.11 (8,	1H), 7.20 (dd,	$J = 2.1, 8.4  \mathrm{Hz}$	z, 1H), 7.22-7.26	E,
	2H), 7.38 (d, J = 2.	J = 2.1  Hz, 111)							
	IR (KBr) 3339, 1608, 1530, 1492, 1429, 1362, 1288, 1258, 1232, 1213, 1189, 1112, 889, 783 cm <sup>-1</sup>	08, 1530, 1492,	1429, 1362, 12	288, 1258, 12:	32, 1213, 1186	, 1112, 889, 7	83 cm <sup>-1</sup>		
~ <u>-</u>	amorphous	8 176 6 9H)	E (119 9) 6E E	44 (c. 3H) 3	74 (a 341) 5 9	90 Z (H6 9) E	(s. 1H) 7.14.9	36 L (H6 m) 06 /	3
1.1113	J. M. M. (1907), W. (1907), W. M. (1907), W. (1907), W. M. (1907), W. M. (1907), W. M. (1907), W. M.	32-7.55 (m, 7H)	), 7.72 (d, J = 8	i.4 Hz, 21I), 9.	72 (6, 1H), 2.2 22 (6, 1H),	*O: * '(' * * * '0') O:	() () () (o)		į
-	IR (KBr) 3382, 1684, 1518, 1469, 1365, 1237, 1150, 1017, 972, 872, 915 cm <sup>-1</sup>	84, 1518, 1469,	1365, 1237, 11	150, 1017, 972	, 872, 815 cm				
	mp 173-175 C								
_	1H NMR (CDCl3) & 1.76 (8, 3H), 1.81 (8, 3H), 1.97 (8, 3H), 3.19 (8, 6H), 3.21 (8, 3H), 3.37 (8, 3H), 3.75 (8, 3H), 4.62 (d, J=	δ 1.76 (s, 3H),	, 1.81 (s, 3H), 1	1.97 (s, 3H), 3	i. 19 (s, 6H), 3.	21 (s, 3H), 3.3	7 (a, 3H), 3.75	(8, 3H), 4.62 (d,	11
-1114	-1114 6.9 Hz, 2H), 5.50 (t, J = 6.9 Hz, 1H), 6.85 (m, 2H), 7.06 (d, J = 8.4 Hz, 1H), 7.25 (m, 1H), 7.37 (br s, 1H), 7.66 (d, J = 8.7 Hz,	(t, J = 6.9  Hz, 11)	H), 6.85 (m, 2H	I), 7.06 (d, J =	: 8.4 Hz, 11I),	7.25 (m, 1H),	7.37 (br s, 1H),	7.66 (d, J = 8.7)	Hz,
C4	2H)								
1	IR (KBr) 3421, 1518, 1470, 1366, 115, 1107, 970, 814 cm <sup>-1</sup>	18, 1470, 1366,	115, 1107, 970	), 814 cm <sup>-1</sup>					

Table 220

	mp 96-98 °C
	111 NMR (DMSO-da) & 1.72 (8, 3H), 1.77 (8, 3H), 3.27 (8, 3H), 3.59 (8, 3H), 4.21 (8, 2H), 4.55 (d, J = 6.3 Hz, 2H), 5.50 (t, J =
1.1115	1-1115 6.3 Hz, 111), 6.17 (s, 111), 6.59 (dd, J = 8.1, 1.8 Hz, 111), 6.66 (d, J = 1.8 Hz, 111), 6.82 (d, J = 8.7 Hz, 2H), 6.97 (d, J = 8.1 Hz,
	111), 7.42 (d, J = 8.7 Hz, 211), 8.89 (br s, 111), 9.45 (br s, 1H)
	IR (KBr) 3431, 3396, 3319, 1611, 1621, 1486, 1264, 1172, 1111, 987, 826 cm <sup>-1</sup>
	mp 186-188 C
	"II NMR (DMSO-da) $\delta$ 1.72 (9, 311), 1.76 (9, 611), 3.28 (9, 3H), 3.68 (8, 311), 4.54 (d, $J=6.6$ Hz, 2H), 5.48 (t, $J=6.6$ Hz, 1H),
1.1116	1.1116 6.53.6.58 (m, 111), 6.65 (d, J = 1.8 Hz, 111), 6.83-6.89 (m, 4H), 7.43 (d, J = 8.4 Hz, 2H), 8.73 (br a, 1H), 8.96 (br a, 1H), 9.53
	(br.s, 1H)
	IR (KBr) 3429, 1652, 1611, 1619, 1474, 1250, 1080, 1018, 981, 836 cm <sup>-1</sup>
	mp 210.213 C
	HI NMR (CDCL) $\delta$ 3.48 (8, 311), 3.77 (8, 311), 5.16 (8, 211), 6.71 (8, 111), 5.85 (8, 111), 6.48 (8, 111), 6.95 (dd, $J = 8.4, 2.1$
1.1117	Hz, 1H), 7.04 (d, $J = 8.4$ Hz, 1H), 7.07 (d, $J = 2.1$ Hz, 1H), 7.40-7.48 (m, 5H), 7.83 (d, $J = 9.0$ Hz, 2H), 8.32 (d, $J = 9.0$ Hz, 2H)
	IR (KBr) 3499, 1511, 1343, 1284, 1247, 1195, 1109, 1070, 1013 cm <sup>-1</sup>
	mp 156-158 °C
	1H NMR (CDCl <sub>3</sub> ) & 2.67 (9, 3H), 3.14 (9, 3H), 3.66 (9, 3H), 3.80 (9, 3H), 5.20 (9, 2H), 6.87 (9, 1H), 7.16 (d, J = 8.7 Hz, 1H),
811:	7.32.7.48 (m, 7H), $7.82$ (d, $J = 9.2$ Hz, 2H), $8.32$ (d, $J = 9.2$ Hz, 2H)
	IR (KBr) 1518, 1479, 1350, 1177, 1119, 1079, 947, 816 cm <sup>-1</sup>
	mp 173-176 C
1.1119	5.50 (t, J = 6.7 Hz, 1H), 6.87 (s, 1H), 7.10 (d, J = 8.4 Hz, 1H), 7.35 (d, J = 8.4, 2.1 Hz, 1H), 7.39 (d, J = 2.0 Hz, 1H), 7.82 (d, J
	= 9.0  Hz, 2H), 8.32 (d, $J = 9.0  Hz$ , 2H)
	IR (KBr) 1519, 1479, 1360, 1178, 1075, 946, 850, 799 cm <sup>-1</sup>

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Table 221

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30	<b>45</b>	40	35	30	25	20	15	10	5
L-1120	mp 191-193 °C  111 NMR (CDCl3) & 1.77 (s, 311), 1.82 (s, 311), 3.48 (s, 3H), 3.77 (s, 311), 4.63 (d, J = 6.6 Hz, 2H), 5.53 (t, J = 6.6 Hz, 1H),  1-1120 5.72 (s, 1H), 5.83 (s, 1H), 6.48 (s, 1H), 6.93 (dd, J = 8.1, 1.8 Hz, 1H), 6.98 (d, J = 8.1 Hz, 1H), 7.04 (d, J = 1.8 Hz, 1H), 7.83 (d, J = 9.0 Hz, 211), 8.32 (d, J = 9.0 Hz, 2H)	6 1.77 (s, 3H), 11H), 6.48 (s, 11)	1.82 (s, 3H), 3. H), 6.93 (dd, J =	48 (s, 3H), 3.7 = 8.1, 1.8 Hz, 1	7 (s, 3H), 4.6; H), 6.98 (d, J	3 (d, J = 6.6 H <sub>2</sub>	, 2H), 5.53 (t.	, J = 6.6 Hz, 1H 8 Hz, 1H), 7.83 (	€ <del>1</del> 6
1.1121	IR (KBr) 3492, 1588, 1511, 1482, 1345, 1283, 1244, 1116, 1069, 1010 cm <sup>-1</sup> mp 135-138 °C  III NMR (CDCl <sub>3</sub> ) \$ 1.76 (a, 311), 1.82 (a, 311), 3.61 (a, 311), 3.67 (a, 311), 3.73 (a, 311), 4.62 (d, J = 6.9 Hz, 2H), 5.00 (br. a, 111), 5.60-5.57 (m, 111), 5.69 (br. a, 111), 6.65 (a, 111), 6.86-6.96 (m, 4f1), 7.00 (d, J = 1.8 Hz, 111), 7.48 (d, J = 8.4 Hz, 2H)  IR (KBr) 3428, 2938, 1680, 1613, 1594, 1520, 1479, 1460, 1393, 1260, 1226, 1104, 1081, 993, 834 cm <sup>-1</sup>	8, 1511, 1482, 1 5 1.76 (a, 3H), 1H), 5.69 (br. s, 8, 1680, 1613, 1	1345, 1283, 124 1.82 (s, 111), 3. 111), 6.65 (s, 11 1694, 1520, 147)	4, 1116, 1069, 61 (s, 3H), 3.6 1), 6.86-6.96 (r 9. 1460, 1393,	7 (s, 3H), 3.7; n, 4H), 7.00 (c 1260, 1226, 1	3 (s, 311), 4.62 (l), J = 1.8 Hz, 11	(d, J = 6.9 Hz H), 7.48 (d, J = 834 cm <sup>-1</sup>	, 2H), 5.00 (br. = 8.4 Hz, 2H)	o o
1.1122		TC (14) \$\delta\$ 1.78 (s, 3H), 1.82 (s, 3H), 2.34 (s, 3H), 4.65-4.67 (d, J = 6.9 Hz, 2H), 5.5 (z, 2H), 7.05-7.25 (m, 5H), 7.26-7.45 (m, 2H), 7.75 (m, 2H) (m,	1.82 (s, 3H), 2.3 iH), 7.26-7.45 (i , 1385, 1301, 15	34 (s, 3H), 4.65 m, 2H), 7.75 (n 272, 1169, 113	n, 2H) 2, 1070, 1037,	8.9 Hz, 2H), 6.6	i5 (m, 1H), 6.4	11-6.78 (dt, J F.	Ξ
1.1123	mp 178-180 H NMR (CD Hz, 2H), 5.00 IR (CHCls) 3	5 1.75 (s, 3H), H), 5.57 (m, 1H	1.78-1.79 (d, J : ), 5.75 (s, 1H), (	= 0.6 Hz, 3H), 5.79 (s, 1H), 6. 189, 1464, 140	2.13 (s, 3H), 84-7.00 (m, 5l 0, 1259, 1173,	3.50 (s, 3H), 3./ H), 7.50-7.53 (n 1139, 1102, 10	87 (s, 3H), 4.6 n, 2H) 09, 930, 865,	3-4.65 (d, J = 6. 835 cm <sup>-1</sup>	9
1.1124		3.03 (a, 6H), 3	3.54 (s, 3H), 3.7	'6 (в, 3H), 3.91	(s, 3H), 6.22	(s, 2H), 6.80-6.!	99 (m, 6H), 7.2	28-7.58 (m, 7H)	

IR (CHCl<sub>13</sub>) 2938, 1731, 1609, 1627, 1485, 1442, 1394, 1365, 1174, 1141, 1082, 1037, 1013, 961, 936, 863 cm<sup>-1</sup>

Table 222

	np 103-106 °C
	111 NMR (CDCM <sub>3</sub> ) & 1.78 (s, 3H), 1.82-1.83 (d, J = 0.9 Hz, 3H), 4.65-4.67 (d, J = 6.9 Hz, 2H), 5.55 (m, 1H), 6.41-6.78 (td, J
1.1125	F.11 = 54.9, 2.7 Hz, 2H), 6.94-7.31 (m, 7H), 7.73 (m, 2H)
	IR (CHCh) 3592, 1612, 1525, 1495, 1385, 1301, 1263, 1187, 1173, 1132, 1069, 1036, 917, 889, 838 cm <sup>-1</sup>
	mp 153-155 C
	111 NMR (CDCta) & 1.75 (8, 311), 1.78-1.79 (d, J = 0.9 Hz, 311), 2.58 (8, 3H), 3.03 (8, 6H), 3.55 (8, 3H), 3.77 (8, 3H), 3.88 (8,
1.1126	311), $4.61-4.64$ (d, $J=6.9$ Hz, 211), $6.54$ (m, 111), $6.80-6.97$ (m, 611), $7.64-7.67$ (d, $J=8.7$ Hz, 211)
	IR (CHCh) 2938, 1609, 1527, 1485, 1464, 1442, 1392, 1365, 1174, 1140, 1082, 1038, 1012, 961, 935 cm <sup>-1</sup>
	mp 160-161 C
	11 NMR (CDCh) 6 2.12 (8, 3H), 3.49 (8, 3H), 3.89 (8, 3H), 4.89 (br, 1H), 5.21 (8, 2H), 5.76 (8, 1H), 6.79-6.92 (m, 5H), 7.00
1-1127	1-1127 (d, J = 8.4 Hz, 1H), 7.31-7.53 (m, 7H)
	1R (CHCL <sub>b</sub> ) 3594, 3517, 2937, 1731, 1612, 1589, 1622, 1489, 1455, 1400, 1327, 1259, 1240, 1173, 1139, 1102, 1011, 930, 865,
	835 cm <sup>-1</sup>
	mp 149-150 °C
	1H NMR (CDCl <sub>3</sub> ) & 1.74-1.75 (d, J = 0.9 Hz, 3H), 1.78-1.79 (d, J = 0.9 Hz, 3H), 3.03 (s, 1H), 3.49 (s, 6H), 3.76 (s, 3H), 3.88
	8, 3H), 4.62.4.64 (d, J = 6.6 Hz, 2H), 5.57 (m, 1H), 5.96 (e, 1H), 6.49 (e, 1H), 6.81-6.84 (m, 2H), 6.95-7.03 (m, 3H), 7.55-7.58
1.1128	(m, 2H)
	IR (CHCla) 3509, 2937, 1675, 1610, 1584, 1528, 1492, 1464, 1397, 1362, 1323, 1197, 1175, 1140, 1117, 1078, 1038, 1011,
	929, 835 cm <sup>1</sup>
 	mp 163-165 C
	14 NMR (CDC13) 6 2.15 (8, 3H), 2.47 (8, 3H), 3.20 (8, 3H), 3.55 (8, 3H), 3.90 (8, 3H), 5.22 (8, 2H), 6.80 (dd, J = 8.4, 2.1 Hz,
6211.1	1H), 6.88 (d, J = 2.1 Hz, 1H), 7.00 (d, J = 8.4 Hz, 1H), 7.17 (s, 1H), 7.35-7.47 (m, 7H), 7.66-7.69 (m, 2H)
	IR (CHCl3) 2938, 1604, 1584, 1518, 1478, 1370, 1331, 1241, 1176, 1150, 1010, 987, 937, 872, 846 cm <sup>-1</sup>

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Table 223

1-1130	mp 142-144 °C. HI NMR (CDCk3) & 1.76-1.77 (d, J = 0.9 Hz, 3H), 1.79-1.80 (d, J = 0.9 Hz, 3H), 2.16 (s, 3H), 2.60 (s, 3H), 3.20 (s, 3H), 3.57 (s, 3H), 3.88 (s, 3H), 4.62-4.65 (d, J = 6.6 Hz, 2H), 5.55 (m, 1H), 6.83-6.87 (m, 2H), 7.00 (d, J = 8.4 Hz, 1H), 7.18 (s, 1H), 7.35-7.38 (m, 2H), 7.67-7.70 (m, 2H)  H. (CHCk3) 1604, 1582, 1517, 1478, 1416, 1370, 1332, 1240, 1176, 1150, 1093, 1008, 987, 936, 872 cm <sup>-1</sup>
1.1131	mp 121-123 °C III NMR (DMSO·d <sub>6</sub> )
1.1132	mp 169-170 °C  III NMR (CDCl <sub>3</sub> )
1.1133	mp 135-136 °C  'II NMR (CIDCl <sub>3</sub> )

Table 224

	mp 154-155 °C
	111 NMR (CDCL <sub>3</sub> ) & 1.15 (t, J = 7.2 Hz, 3H), 1.75 (d, J = 0.9 Hz, 3H), 1.79 (d, J = 0.9 Hz, 3H), 2.54 (s, 3H), 3.21 (s, 3H), 3.72
1.1134	1-1134 (q, J = 7.2 Hz, 211), 3.78 (s, 311), 3.88 (s, 311), 4.63 (d, J = 6.9 Hz, 211), 5.54 (m, 111), 6.85 (s, 111), 6.95-6.98 (m, 311), 7.34-7.40
	(m, 2H), 7.68-7.74 (m, 2H)
	1R (KBr) 1519, 1481, 1467, 1365, 1335, 1245, 1231, 1184, 1157, 1081, 1038, 972, 889, 872, 840, 800 cm <sup>-1</sup>
	mp 136-137 C
	111 NMR (CDCE) 6 1.16 (t, J = 6.9 Hz, 311), 1.74 (e, 311), 1.78 (e, 311), 3.61 (q, J = 6.9 Hz, 211), 3.76 (e, 3H), 3.88 (e, 3H),
	4.63 (d, J = 6.9 Hz, 2H), 5.03 (s, 1H), 5.57 (m, 1H), 5.99 (s, 1H), 6.46 (s, 1H), 6.89-6.94 (m, 2H), 6.97 (d, J = 8.7 Hz, 1H), 7.01
- 1135	(d, J = 1.8 Hz, 1H), 7.02 (dd, J = 1.8, 8.7 Hz, 1H), 7.51-7.57 (m, 2H)
	1R (KBr) 3433, 1613, 1522, 1489, 1464, 1443, 1402, 1383, 1364, 1270, 1235, 1214, 1174, 1140, 1113, 1072, 1036, 983, 825
	cm.i
	mp 155-157℃
	1H NMR (CDCl <sub>3</sub> ) 6 2.05 (t, J = 2.7 Hz, 1H), 2.76 (dt, J = 6.3, 2.7 Hz, 2H), 2.77 (s, 3H), 3.21 (s, 3H), 3.28 (s, 3H), 3.66 (s,
1.1136	1.1136 311), 3.78 (s, 311), 4.23 (t, J = 6.3 Hz, 2H), 6.84 (s, 1H), 7.09 (d, J = 8.4 Hz, 1H), 7.36 (dd, J = 8.4, 2.1 Hz, 1H), 7.38 (d, J = 8.7
	Hz, 211), 7.41 (d, $J = 2.1$ Hz, 111), 7.68 (d, $J = 8.7$ Hz, 211)
	IR (Nujol) 3285, 1608, 1519, 1176, 1161, 1119, 1079, 970, 816, 797 cm.1
	foam
	1H NMR (CDCl <sub>3</sub> ) 6 1.83 (s, 3H), 2.58 (t, J = 6.6 Hz, 2H), 2.74 (s, 3H), 3.21 (s, 3H), 3.22 (s, 3H), 3.56 (s, 3H), 3.78 (s, 3H),
1.1137	1.1137 $\sqrt{4.22}$ (t, J = 6.6 Hz, 2H), 4.84 (brs, 1H), 4.89 (brs, 1H), 6.84 (s, 1H), 7.10 (d, J = 8.4 Hz, 1H), 7.32~7.43 (m, 4H), 7.68 (d, J =
	8.7 Hz, 2H),
	IR (Nujol) 1608, 1519, 1176, 1150, 1119, 1078, 968, 869, 816 cm <sup>-1</sup>

Table 225

55

50	45	40 .	35	30	25	20	15	10	5
-1138	foam 1H NMR (C) 4.89 (brs, 1) IR (Nujol) 3	DCl <sub>3</sub> ) $\delta$ 1.81 (s, 3H), 2.55 (t, J = 6.6 Hz, 2H), 3.45 (s, 3H), 1), 6.45 (s, 1H), 6.86 $\sim$ 7.07 (m, 5H), 7.53 (d, J = 8.7 Hz, 2H), 1531, 3328, 1612, 1587, 1523, 1489, 1287, 1226, 1115, 1072,	2.55 (t, J = 6 7.07 (m, 511),	.6 Hz, 2H), 3.4 7.53 (d, J = 8.'	6 (s, 311), 3.74 7 Hz, 211), 15, 1072, 1011	(s, 3H), 4.20 (cm. <sup>1</sup>	., J = 6.6 Hz,	2H), 4.85 (brs,	IH),
-1139		$0.00_{13}$ & $2.07$ (t, $J = 2.7$ Hz, 1H), $2.72$ (dt, $J = 6.87 \sim 7.10$ (m, 5H), $7.63$ (d, $J = 8.7$ Hz, 2H) 482, 3305, 1609, 1597, 1527, 1494, 1253, 12	.7 Hz, 1H), 2.' .63 (d, J = 8.7,	72 (dt, J = 6.6, 11z, 211) 1253, 1240, 12	2.7 Hz, 2H), 3 27, 1127, 1118	46 (e, 3H), 3.7 , 1079, 1010 c	5 (a, 3H), 4.21	(t, J = 6.6 Hz,	2H),
.1140	m.p 194-19° <sup>1</sup> H NMR (1) 111), 6.84 (d 2H) IR (KBr) 34	7 °C (MSO) \$\delta\$ 3.29 (s, 3H), 3.64 (s, 3H), 5.42 (s, 2H), 6.38 (s, 1H), 6.61 (dd, J), \$\delta\$ 8.6 Hz, 2H), 6.96 (d, J = 8.2 Hz, 1H), 7.19 (d, J = 7.8 Hz, 1H), 7.41 (32, 1611, 1566, 1523, 1488, 1430, 1400, 1380, 1241, 1113, 1071, 814 cm <sup>-1</sup>	, 3.64 (s, 3H), (d, J = 8.2 H	5.42 (s, 2H), 6 z, 1H), 7.19 (d, 400, 1380, 124	.38 (s, 1H), 6.5 J = 7.8 Hz, 11 1, 1113, 1071,	51 (dd, J =2.0, 1), 7.41 (d, J = 814 cm <sup>-1</sup>	8.2 Hz, 1H),	6.74 (d, J = 2.0 7.43 (d, J = 8.4	Hz, Hz,
.1141	fourn  1H NMR (CDCl <sub>3</sub> ) \( \delta \) 3.45 (s, 3H), d 3.75 (s, 3H), 3.92 (s, 3H), 5.63 (s, 2H), 6.45 (s, 1H), 6.92 (d, J = 8.7 Hz, 2H), 6.94 (dd, J = 1141    2.1, 8.7 Hz, 1H), 7.01 (d, J = 8.7 Hz, 1H), 7.10 (d, J = 2.1 Hz, 1H), 7.28 (d, J = 4.8 Hz, 1H), 7.52 (d, J = 4.8 Hz, 1H), 7.53 (d, J = 8.4 Hz, 2H)  = 8.4 Hz, 2H)  IR (KBr) 3423, 1702, 1684, 1611, 1523, 1489, 1439, 1402, 1282, 1112, 1073, 1010, 814 cm <sup>-1</sup>	DCl <sub>3</sub> ) δ 3.45 (s, 3H), d 3.75 (s, 3H), 3.92 (s, 3H), 5.63 (s, 2H), 6.45 (s, 1H), 6.92 (d, J = 8.7 Hz, 2H), 6.94 (dd, J = 1H), 7.01 (d, J = 8.7 Hz, 1H), 7.10 (d, J = 2.1 Hz, 1H), 7.28 (d, J = 4.8 Hz, 1H), 7.52 (d, J = 4.8 Hz, 1H), 7.53 (d, J i)  1)  23, 1702, 1684, 1611, 1523, 1489, 1439, 1402, 1282, 1112, 1073, 1010, 814 cm <sup>-1</sup>	d 3.75 (s, 3H) z, 1H), 7.10 (d	, 3.92 (e, 3H), 6 1, J = 2.1 Hz, 11 139, 1402, 128	i,63 (a, 2H), 6.4 H), 7.28 (d, J = 2, 1112, 1073,	16 (s, 1H), 6.92 4.8 Hz, 1H), 7 1010, 814 cm <sup>-1</sup>	(d, J = 8.7 Hz	r, 2H), 6.94 (dd, 1 Hz, 1H), 7.53 (	J = (d, J
-1142	foam  1H NMR (CDCl <sub>3</sub> ) 6 2.74 (8, 3H), 3.21 (8, 3H), 3.22 (8, 3H), 3.55 (8, 3H)  1142 3.6 Hz, 1H), 6.84 (8, 1H), 7.15 (d, J = 8.4 Hz, 1H), 7.17 (d, J = 3.6 Hz, 1 2H), 7.41 (d, J = 2.1 Hz, 1H), 7.67 (d, J = 8.7 Hz, 2H)  1R (KBr) 1728, 1619, 1481, 1365, 1177, 1160, 1079, 969, 876, 797 cm <sup>-1</sup>	OCl <sub>3</sub> ) δ 2.74 (8, 3H), 3.21 (8, 3H), 3.22 (8, 3H), 3.55 (8, 3H), d 3.78 (8, 3H), 3.91 (8, 3H), 5.19 (8, 2H), 6.60 (d, J = 6.84 (8, 1H), 7.15 (d, J = 8.4 Hz, 1H), 7.17 (d, J = 3.6 Hz, 1H), 7.36 (dd, J = 2.1, 8.4 Hz, 1H), 7.38 (d, J = 8.7 Hz, J = 2.1 Hz, 1H), 7.67 (d, J = 8.7 Hz, 2H)  28, 1519, 1481, 1365, 1177, 1150, 1079, 969, 876, 797 cm <sup>-1</sup>	3.21 (s, 3H), 3 J = 8.4 Hz, 1H (d, J = 8.7 Hz 1177, 1150, 10	1.22 (s, 3H), 3.5 (), 7.17 (d, J = () 2.2H)	15 (s, 3H), d 3. 3.6 Hz, 1H), 7. 197 cm <sup>1</sup>	78 (s, 3H), 3.91	(a, 3H), 5.19 8.4 Hz, 1H),	2.74 (s, 3H), 3.21 (s, 3H), 3.22 (s, 3H), 3.55 (s, 3H), d 3.78 (s, 3H), 3.91 (s, 3H), 5.19 (s, 2H), 6.60 (d, J = 1H), 7.15 (d, J = 8.4 Hz, 1H), 7.17 (d, J = 3.6 Hz, 1H), 7.36 (dd, J = 2.1, 8.4 Hz, 1H), 7.38 (d, J = 8.7 Hz, Hz, 1H), 7.67 (d, J = 8.7 Hz, 2H)  1481, 1365, 1177, 1150, 1079, 969, 876, 797 cm. <sup>1</sup>	J = Hz,

Table 226

1.1143	foam 111 NMR (CDCE) & 2.77 (s, 311), 3.21 (s, 311), 3.23 (s, 311), 4.56 (s, 311), 4.78 (s, 311), 4.18 (m, 211), 5.94 (m, 411 NMR (CDCE)) & 2.77 (s, 311), 3.21 (s, 311), 3.23 (s, 311), 4.36 (s, 311), 4.18 (m, 211), 4.18 (m, 211), 5.94 (m, 411 NMR (CDCE)) & 4.18 (m, 411), 4.18
1.1144	foatm 11.1144 = 4.5 Hz, 1H), 6.06 (t, J = 5.1 Hz, 1H), 6.84 (s, 1H), 7.07 (d, J = 8.7 Hz, 1H), 7.35 (dd, J = 2.1, 8.7 Hz, 1H), 7.38 (d, J = 8.7 Hz, 1H), 7.40 (d, J = 2.1 Hz, 1H), 7.67 (d, J = 8.7 Hz, 2H) 11.1144 = 4.5 Hz, 1H), 7.67 (d, J = 8.7 Hz, 2H) 12.11, 7.40 (d, J = 2.1 Hz, 1H), 7.67 (d, J = 8.7 Hz, 2H) 13.11, 7.40 (d, J = 2.1 Hz, 1H), 7.67 (d, J = 8.7 Hz, 2H)
1-1145	In.p 203-205 °C  1H NMR (CDCl <sub>3</sub> ) δ 2.83 (s, 3H), 3.22 (s, 3H), 3.25 (s, 3H), 3.55 (s, 3H), d 3.79 (s, 3H), 4.30 (t, J = 1.8 Hz, 2H), 4.88 (t, J = 1.1145 l.s. 111, 7.67 (d, J = 8.7 Hz, 2H), 7.20 (d, J = 8.7 Hz, 111), 7.37 (dd, J = 2.1, 8.7 Hz, 111), 7.39 (d, J = 8.7 Hz, 2H), 7.42 (d, J = 2.1 Hz, 111), 7.67 (d, J = 8.7 Hz, 2H)  1R (KBr) 3443, 1606, 1519, 1481, 1360, 1179, 1150, 1079, 877, 798 cm. <sup>1</sup>
1.1146	

Table 227

55

50	<b>45</b>	· 40	35	30	25	20	15	10	5
1147	foam  1.11 NMR (CDCLa) & 3.39 (s, 3H), 3.45 (s, 3H), 3.74 (s, 3H), 4.17 (t, J = 1.8 Hz, 2H), 4.83 (t, J = 1.8 Hz, 2H), 6.45 (s, 1H),  1.11 NMR (CDCLa) & 3.39 (s, 3H), 3.45 (s, 3H), 3.74 (s, 3H), 4.17 (t, J = 1.8 Hz, 2H), 4.83 (t, J = 1.8 Hz, 2H), 6.91 (d, J = 8.7 Hz, 1H), 7.08 (d, J = 8.1 Hz, 1H), 7.08 (d, J = 2.1 Hz, 1H), 7.52 (d, J = 8.7 Hz, 2H)  2.11  2.11  2.11  2.11  3.12  3.13  4.11  4.11  4.10  6.91  6.91  6.91  6.91  6.91  6.91  6.91  6.91  6.92  6.91  6.92  6.91  6.91  6.92  6.92  6.92  6.93  6.93  6.93  6.94  6.95  6.94  6.95  6.9	DCla) 6 3.39 (s, 3H), 3.45 (s, 3H), 3.74 (s, 3H), 4.17 (t, J = 1.8 Hz, 2H) 8.7 Hz, 2H), 6.97 (dd, J = 2.1, 8.1 Hz, 1H), 7.06 (d, J = 8.1 Hz, 1H), 7.08 Hz, 1523, 1523, 1489, 1404, 1224, 1114, 1071, 1010, 939, 816 cm <sup>-1</sup>	), 3.45 (s, 3H) l, J = 2.1, 8.1 I 1.489, 1404, 1	, 3.74 (s, 3H) 1z, 1H), 7.06 (224, 1114, 10	(d, J = 8.1 Hz	1.8 Hz, 2H), 4.4, 1H), 7.08 (d, e, 816 cm.	83 (t, J = 1.8 J = 2.1 Hz, 11	DCla) 6 3.39 (s, 3H), 3.45 (s, 3H), 3.74 (s, 3H), 4.17 (t, J = 1.8 Hz, 2H), 4.83 (t, J = 1.8 Hz, 2H), 6.45 (s, 1H), 8.7 Hz, 2H), 6.97 (dd, J = 2.1, 8.1 Hz, 1H), 7.05 (d, J = 8.1 Hz, 1H), 7.08 (d, J = 2.1 Hz, 1H), 7.52 (d, J = 8.7 Hz, 11, 1612, 1589, 1523, 1489, 1404, 1224, 1114, 1071, 1010, 939, 816 cm <sup>-1</sup>	IH), Hz,
-1148	,, 5 -	DC3.) 6 1.1.1 (t, J = 7.5 Hz. 4.80 (s, 2H), 6.84 (s, 1H), 7.3 H), 768 (d, J = 8.7 Hz, 2H) 32, 1609, 1519, 1481, 1365.	: 7.5 Hz, 340), 3 110, 7.20 (d, J Hz, 2H) , 1365, 1177, 1	2.23 (q, J = 7 I = 9.0 ftz, 1H	.5 Hz, 2H), 2. l), 7.37 (dd, J : 70, 876, 797 er	71 (s, 3H), 3.2 = 2.1, 9.0 Hz, 1	1 (s, 31l), 3.2' H), 7.38 (d, J	form 11. NMR (CDCh.) & 1.14 (t, J = 7.5 Hz, 3H), 2.23 (q, J = 7.5 Hz, 2H), 2.71 (s, 3H), 3.21 (s, 3H), 3.27 (s, 3H), 3.60 (s, 3H), 1.78 (s, 3H), 4.80 (s, 2H), 6.84 (s, 1H), 7.20 (d, J = 9.0 Hz, 1H), 7.37 (dd, J = 2.1, 9.0 Hz, 1H), 7.38 (d, J = 8.7 Hz, 2H), 7.42 (d, J = 2.1 Hz, 1H), 7.68 (d, J = 8.7 Hz, 2H) 1.2. 1 Hz, 1H), 7.68 (d, J = 8.7 Hz, 2H) 1.3. 1.4. 1.5. 1.5. 1.5. 1.5. 1.5. 1.5. 1.5	3H),
-1149		nıp.) da,	3H), 3.64 (e, 3 , 6.94 (d, J = 8, 1, 1586, 1523,	3H), 4.85 (s, 2 .4 Hz, 1H), 7. 1489, 1289,	2H), 6.39 (s, 1 44 (d, J = 8.7 1259, 1211, 11	H), 6.69 (dd, J Hz, 2H), 8.54 ( 115, 1075, 1012	= 8.4, 2.1 H <sub>2</sub> (9, 1H) 2, 814 cm <sup>-1</sup>	., 1H), 6.79 (d, J =	2.1
.1150	fonm 1H NMR (CDCl <sub>3</sub> ) J = 8.7 Hz, 2H), 6. IR (KBr) 3432, 16	DCl <sub>3</sub> ) δ 1.91 (e, 3H), 3.45 (s, 3H), 3.75 (s, 3H), 4.89 (s, 2H), 5.29 (brs, 1H), 5.36 (b <sub>1</sub> 2H), 6.97 (dd, J = 8.4, 2.1 Hz, 1H), 7.07 (d, J = 8.4 Hz, 1H), 7.08 (d, J = 2.1 Hz, 1H), 32, 1612, 1588, 1523, 1489, 1288, 1224, 1192, 1113, 1070, 1010, 938, 825, 813 cm <sup>-1</sup>	), 3.45 (s, 3H), , 2.1 Hz, 1H), ' , 1489, 1288, 1	3.75 (s, 3H), 7.07 (d, J = 8. 224, 1192, 11	4.89 (s, 2H), t 4 Hz, 1H), 7.C 113, 1070, 101	5.29 (brs, 1H), 18 (d, J = 2.1 H 0, 938, 825, 81	5.36 (brs, 1H) z, 1H), 7.54 (c)	DCl <sub>3</sub> ) δ 1.91 (e, 3H), 3.45 (s, 3H), 3.75 (s, 3H), 4.89 (s, 2H), 5.29 (brs, 1H), 5.36 (brs, 1H), 6.45 (s, 1H), 6.92 (d, 2H), 6.97 (dd, J = 8.4, 2.1 Hz, 1H), 7.07 (d, J = 8.4 Hz, 1H), 7.08 (d, J = 2.1 Hz, 1H), 7.54 (d, J = 8.7 Hz, 2H) 32, 1612, 1588, 1523, 1489, 1288, 1224, 1192, 1113, 1070, 1010, 938, 825, 813 cm <sup>-1</sup>	Ġ,
-1151	form III NMR (C = 7.5 Hz, 14 (d, J = 8.7 H	<ul> <li>DCl<sub>3</sub>) \$ 3.45 (s, 311), 3.75 (s, 311), 4.98 (d, J = 1.8 Hz, 2H), 5.92 (dt, J = 1), 6.92 (d, J = 8.7 Hz, 2H), 6.98 (dd, J = 8.4, 2.1 Hz, 1H), 7.09 (d, J = 2.7z, 2H)</li> <li>[z, 2H]</li> <li>10, 1612, 1589, 1523, 1489, 1403, 1224, 1112, 1070, 1011, 938, 826 cm<sup>-1</sup></li> </ul>	), 3.75 (s, 3H), c, 2H), 6.98 (de 1489, 1403, 1	4.98 (d, J = 1 d, J = 8.4, 2.1 224, 1112, 10	.8 Hz, 2H), 6. Hz, 1H), 7.09 70, 1011, 938	92 (dt, J = 7.5, (d, J = 2.1 Hz), 826 cm.	1.8 Hz, 1H),	(bCl <sub>3</sub> ) δ 3.45 (s, 3H), 3.75 (s, 3H), 4.98 (d, J = 1.8 Hz, 2H), 5.92 (dt, J = 7.5, 1.8 Hz, 1H), 6.45 (s, 1H), 6.46 (d, J H), 6.92 (d, J = 8.7 Hz, 2H), 6.98 (dd, J = 8.4, 2.1 Hz, 1H), 7.09 (d, J = 2.1 Hz, 1H), 7.11 (d, J = 8.4 Hz, 1H), 7.53 (z, 2H)  [z, 2H)  10, 1612, 1589, 1523, 1489, 1403, 1224, 1112, 1070, 1011, 938, 826 cm <sup>-1</sup>	d, J

Table 228

	foam
	MR
1-1152	= 13.8 Hz, 111), 6.92 (d, J = 8.7 Hz, 2H), 6.97 (dd, J = 8.4, 2.1 Hz, 1H), 7.04 (d, J = 8.4 Hz, 1H), 7.09 (d, J = 2.1 Hz, 1H), 7.64
	(d, J = 8.7  Hz, 2H)
	1R (KBr) 3427, 1612, 1588, 1523, 1489, 1403, 1226, 1192, 1175, 1113, 1070, 1011, 938, 918, 826 cm <sup>-1</sup>
	₩ 189 ℃
	111 NMR (CDCE) & 2.84 (9, 311), 3.33 (8, 311), 3.74 (6, 311), 3.08 (6, 311), 4.18 (6, 311), 5.38 (6, 211), 7.05 (6, 111), 7.36-7.64 (m.
1.1163	1011), 8.61 (d, J = 8.7 Hz, 111), 8.82 (brs, 111)
	IR(KBr) 3381, 2942, 1724, 1538, 1481, 1369, 1296, 1177, 1163, 1082, 963, 821 cm· <sup>1</sup>
	mp78-80 C
	1H NMR (CDCl <sub>3</sub> ) & 2.17 (8, 3H), 2.67 (8, 3H), 3.13 (8, 3H), 3.57 (8, 3H), 3.79 (8, 3H), 5.19 (8, 2H), 6.83 (8, 1H), 7.15 (d, J=
1.1154	8.6 Hz, 1H), 7.31-7.45 (m, 7H), 7.62 (d, J = 8.2 Hz, 1H), 7.79 (s, 1H), 8.44 (d, J = 8.6 Hz, 1H), 8.51 (brs, 1H)
	[R(KBr) 3398, 2939, 1739, 1629, 1477, 1368, 1287, 1240, 1177, 1119, 1078, 967, 816, 796, 622 cm <sup>-1</sup>
	mp74-75, C
	1H NMR (CDC13) 6 1.68 (s, 3H), 1.76 (s, 6H), 1.81 (s, 3H), 2.69 (s, 3H), 3.24 (s, 3H), 3.52 (s, 3H), 3.80 (s, 3H), 3.88 (s, 3H),
1.1155	3.88-4.02 (m, 211), 4.64 (d, J = 7.2 Hz, 2H), 5.25 (t, J = 7.8 Hz, 1H), 5.50 (t, J = 5.7 Hz, 1H), 6.88 (s, 1H), 7.08-7.38 (m, 6H)
	IR(KBr) 3412, 2939, 1697, 1519, 1483, 1366, 1268, 1207, 1178, 1080, 964, 808, 523 cm <sup>-1</sup>
	mp72.74 C
	14 NMR (CDC13) 6 1.95 (8, 3H), 1.99 (8, 3H), 2.87 (8, 3H), 3.42 (8, 3H), 3.74 (8, 3H), 3.97 (8, 3H), 4.16 (8, 3H), 4.82 (d, J=
1.1156	1.1156 6.6 Hz, 2H), 5.68 (t, J = 5.7 Hz, 1H), 7.04 (s, 1H), 7.27 (d, J = 8.1 Hz, 1H), 7.39-7.58 (m, 4H), 8.60 (d, J = 8.4 Hz, 1H), 8.81
	(brs, 1H)
	IR(KBr) 3407, 2940, 1731, 1601, 1638, 1481, 1366, 1294, 1178, 1165, 1079, 805, 562 cm <sup>-1</sup>

Table 229

55

50	45	40	35	30	25	20	15	10	5
1157	mp68-69 °C; HI NMR (CDCI.) \$\delta  1.70 (s, 3H), 1.77 (s, 3H), 1.81 (s, 3H), 3.70 (s, 3H), 3.25 (s, 3H), 3.55 (s, 3H), 3.81 (s, 3H), 4.64 (d, J = 6.6 Hz, 2H), 5.27 (t, J = 7.5 Hz, 1H), 5.50 (t, J = 6.9 Hz, 1H), 6.86 (s, 1H), 7.10 (d, J = 8.4 Hz, 1H), 7.25-7.40 (m, 3H), 7.57 (d, J = 8.1 Hz, 1H), 7.76 (s, 1H)  J = 8.1 Hz, 1H), 7.76 (s, 1H)  IR(KBr) 3422, 2939, 1701, 1519, 1480, 1368, 1203, 1177, 1078, 957, 801, 522 cm. <sup>1</sup>	5 1.70 (s, 3H), J = 7.5 Hz, 1I 6 (s, 1H)	1, 5.50 (t, J = 0	1.81 (s, 3H), 5 6.9 Hz, 1H), (	2.70 (s, 311), 3. 3.86 (s, 111), 7. 8, 957, 801, 55	.25 (s, 3H), 3.5i 10 (d, J = 8.4 F	5 (e, 3H), 3.81 lz, 1H), 7.25-'	ı (s, 3H), 4.64 (d 7.40 (m, 3H), 7.5	, J = 7 (d,
168	mp64-66 °C 411 NMR (CDCLs) & 3.47 (s, 311), 3.74 (s, 311), 5.19 (s, 211), 5.86 (brs, 111), 6.44 (s, 111), 7.08-7.69 (m, 1111), 8.06 (brs, 111) IR(KBr) 3399, 2938, 1726, 1624, 1604, 15263, 1487, 1403, 1302, 1208, 1178, 1068, 695, 520 cm <sup>-1</sup>	3.47 (s, 31l), , 1726, 1624, 1	3.74 (s, 3H), 6	i. 19 (s, 2H), 6 487, 1403, 13	.86 (brs, 111), o	6.44 (s, 1H), 7. 3, 1068, 695, 55	08-7.69 (m, 1 20 cm <sup>-1</sup>	1H), 8.06 (brs, 1	£
119	mp68-70 °C <sup>1</sup> H NMR (CDCl <sub>3</sub> )	2.57 (s, 3H), , 1728, 1606, 1	3.67 (s, 3H), 3 623, 1482, 139	1.76 (s, 3H), 5 97, 1367, 123	.21 (s, 2H), 6.8 3, 1209, 1178,	34 (s, 1H), 7.11 1078, 795, 726	.7.73 (m, 11H 5, 642 cm <sup>-1</sup>	), 8.29 (brs, 1H)	
160	mp72.73 °C  11 NMR (CDCl <sub>3</sub> )	1.75 (s, 6H), (d, J = 6.9 Hz, Hz, 1H), 6.95	1.78 (s, 3H), 1 2H), 5.41 (t, J (s, 1H), 7.06 (s	1.82 (s, 3H), 3 = 6.3 Hz, 1H) s, 1H), 7.13·7	3.48 (s, 3H), 3. 1, 5.53 (t, J = 6. 16 (m, 2H), 7. 1, 805, 757 cm	76 (s, 3H), 3.7( :9 Hz, 1H), 6.6i .26 (s, 1H)	3 (d, J = 7.2 F 8 (brs, 1H), 6.	[z, 2H), 3.89 (s, 94 (brs, 1H), 6.4	3H), 9 (s,
191	mp68-69 °C <sup>1</sup> H NMR (CDCl <sub>3</sub> ) δ 1.76 (s, 3H), 1.81 (s, 3H), 3.48 (s, 3H), 3.75 (s, 3H), 3.91 (s, 3H), 4.61 (d, J = 7.2 Hz, 2H), 5.53 (t, J = 6.0 Hz, 1H), 5.91 (brs, 2H), 6.47 (s, 1H), 6.83 (d, J = 8.1 Hz, 2H), 6.95 (s, 1H), 7.06-7.09 (m, 2H), 7.16 (s, 1H), 7.26 (s, 1H) <sup>1</sup> IR(KBr) 3406, 2933, 1524, 1490, 1397, 1270, 1241, 1116, 1076, 1069, 811, 773 cm <sup>-1</sup>	1.76 (s, 3H), iH), 6.47 (s, 1H	1.81 (s, 3H), 3 f), 6.83 (d, J = 397, 1270, 124	.48 (s, 3H), 3. 8.1 Hz, 2H), 1116, 1070	75 (s, 3H), 3.9 6.95 (s, 11I), 7 5, 1069, 811, 7	1 (s, 3H), 4.61 .06-7.09 (m, 2F	(d, J = 7.2 Hz 1), 7.16 (s, 1H	, 2H), 5.63 (t, J =	6.0

Table 230

1.1162	INDELSEST T.  HE NMR (CDCE) & 1.76 (a, 6H), 1.79 (a, 3H), 1.81 (a, 3H), 3.50 (a, 3H), 3.75 (a, 3H), 3.80 (d, J = 6.6 Hz, 2H), 4.36 (bra, 1H),  HE NMR (CDCE) & 1.76 (a, 6H), 1.79 (a, 3H), 1.81 (a, 3H), 3.50 (a, 3H), 3.75 (a, 3H), 3.80 (d, J = 6.6 Hz, 2H), 4.36 (bra, 1H),  HERRY (CDCE) & 1.60 (a, 1H), 5.39 (b, J = 6.3 Hz, 1H), 5.68 (bra, 1H), 5.68 (bra, 1H), 6.90 (bra, 1H), 6.73 (a, J = 6.73 (a, J = 6.9 Hz, 1H), 7.26 (d, J = 0.9 Hz, 1H), 7.47 (dd, J = 2.1, 8.4 Hz, 1H), 7.59 (d, J = 2.1 Hz, 1H)  HERRY (CDCE) & 1.60 (a, 1H), 1.75 (a, 1H), 1.75 (a, J = 0.9 Hz, 1H), 7.70 (ad, J = 2.1, 8.4 Hz, 1H), 7.59 (d, J = 2.1 Hz, 1H)
1.1163	
1.1164	amorphous 111 NMR (CDCL <sub>3</sub> ) & 2.68 (s, 311), 3.13 (s, 311), 3.43 (s, 311), 3.54 (s, 311), 3.80 (s, 311), 5.19 (s, 2H), 6.87 (s, 1H), 7.16 (d, J = 8.7 Hz, 1H), 7.32-7.49 (m, 9H), 7.69 (d, J = 8.4 Hz, 2H) 1R (KBr) 1698, 1522, 1482, 1367, 1080, 1014, 947, 815, 795 cm <sup>-1</sup>
1.1165	foam '11 NMR (CDCl3) & 1.47 (e, 3H), 1.72 (e, 3H), 1.77 (e, 3H), 1.81 (e, 3H), 2.71 (e, 3H), 3.24 (e, 3H), 3.51 (e, 3H), 3.80 (e, 3H),  1.1165 4.37 (d, J = 7.8 Hz, 2H), 4.64 (d, J = 6.6 Hz, 2H), 5.29 (t, J = 7.8 Hz, 1H), 5.60 (t, J = 6.6 Hz, 1H), 6.88 (e, 1H), 7.09 (d, J = 8.4 Hz, 1H), 7.27 (d, J = 8.7 Hz, 2H), 7.35 (dd, J = 8.4, 2.3 Hz, 1H), 7.39 (d, J = 2.3 Hz, 1H), 7.66 (d, J = 8.7 Hz, 2H)  1.1165 1.1165 1.1165 1.1165 1.1165 1.117, 1080, 972, 946, 814, 795 cm <sup>-1</sup>
1.1166	mp 135-136 °C 111 NMR (CDCl3) \$\delta\$ 1.77 (s, 3H), 1.81 (s, 3H), 2.71 (s, 3H), 3.24 (s, 3H), 3.54 (s, 3H), 3.80 (s, 3H), 4.64 (d, J = 6.7 Hz, 2H), 5.50 (t, J = 6.7 Hz, 1H), 6.87 (s, 1H), 7.10 (d, J = 8.4 Hz, 1H), 7.34 (d, J = 8.1 Hz, 2H), 7.35 (dd, J = 8.4, 2.2 Hz, 1H), 7.39 (d, J = 2.2 Hz, 1H), 7.69 (d, J = 8.1 Hz, 2H) 18 2.2 Hz, 1102, 1622, 1481, 1362, 1275, 1150, 1081, 1014, 978, 817, 793 cm. <sup>1</sup>

Table 231

	mp 169-171 °C ЧІ NMR (DMSO-d <sub>6</sub> )   δ  1.71 (4, 311), 1.72 (8, 611), 1.76 (8, 311), 3.31 (8, 311), 3.63 (8, 311), 3.64 (m, 2H), 4.54 (d, J = 6.8 Hz,
1.1167	1.1167 2H), 5.29 (t, J = 7.5 Hz, HI), 5.49 (t, J = 6.8 Hz, HI), 5.75 (t, J = 8.1 Hz, HI), 6.37 (s, HI), 6.63 (d, J = 8.4 Hz, 2H), 6.64 (dd, J = 8.1, 2.0 Hz, HI), 6.73 (d, J = 2.0 Hz, HI), 6.88 (d, J = 8.4 Hz, 2H), 7.37 (d, J = 8.4 Hz, 2H), 8.41 (s, HI), 8.70 (s, HI)
	IR (KBr) 3473, 3276, 1608, 1523, 1491, 1310, 1252, 1190, 1112, 1072, 934, 824, 776 cm.1
	mp 159-160 %
	111 NMR (DMSO-da) & 1.72 (g, 311), 1.76 (g, 311), 3.31 (g, 311), 3.64 (g, 311), 4.54 (d, J = 6.8 Hz, 211), 5.49 (t, J = 6.8 Hz, 111),
1.1168	5.76 (br s, 111), 6.37 (s, 111), 6.61 (d, J = 8.4 Hz, 211), 6.64 (dd, J = 8.1, 2.0 Hz, 1H), 6.73 (d, J = 2.0 Hz, 1H), 6.88 (d, J = 8.1
	Hz, 111), 7.39 (d, J = 8.4 Hz, 2H), 7.37 (d, J = 8.4 Hz, 2H), 8.42 (br s, 1H), 8.70 (br s, 1H)
	IR (KHr) 3458, 3332, 1609, 1524, 1492, 1411, 1393, 1295, 1234, 1107, 1071, 1012, 994, 781 cm <sup>-1</sup>
	nip 183-184 C
	<sup>1</sup> H NMR (CDCl <sub>3</sub> ) $\delta$ 1.76 (d, J = 0.6 Hz, 3H), 1.82 (s, 3H), 3.13 (s, 3H), 3.48 (s, 3H), 3.76 (s, 3H), 4.63 (d, J = 6.9 Hz, 2H),
1.1169	5.53 (m, 1H), 5.72 (s, 1H), 5.83 (s, 1H), 6.46 (s, 1H), 6.93 (dd, J = 1.8, 8.4 Hz, 1H), 6.98 (d, J = 8.4 Hz, 1H), 7.04 (d, J = 1.8
	Hz, 111), 7.82-7.89 (m, 211), 8.00-8.06 (m, 211)
	IR (KBr) 3446, 1593, 1499, 1482, 1461, 1387, 1311, 1278, 1245, 1189, 1146, 1111, 1086, 1068, 1010, 997, 942, 766 cm <sup>-1</sup>
	mp 178-179 ℃
	1H NMR (CDCl <sub>3</sub> ) 6 1.76 (s, 3H), 1.82 (s, 3H), 2.80 (s, 3H), 3.47 (s, 3H), 3.76 (s, 3H), 4.62 (d, J = 7.2 Hz, 2H), 5.53 (m, 1H),
1 1 2 2 0	5.72 (s, 1H), 5.86 (s, 1H), 6.47 (e, 1H), 6.94 (dd, J = 1.8, 8.1 Hz, 1H), 6.98 (d, J = 8.1 Hz, 1H), 7.05 (d, J = 1.8 Hz, 1H), 7.72-
2	7.77 (m, 2H), 7.79-7.85 (m, 2H)
	IR (KBr) 3420, 1587, 1527, 1482, 1449, 1430, 1416, 1390, 1357, 1290, 1240, 1214, 1198, 1135, 1115, 1073, 1019, 998, 975,
	962, 937, 831 cm <sup>-1</sup>

Table 232

1.1171	mp 136-139 °C  11 NMR (CDCH) \$\delta = 1.73 (8, 311), 1.77 (8, 311), 2.99 (8, 611), 3.71 (d, \$J = 6.6 Hz, 211), 3.76 (8, 311), 3.78 (8, 311), 5.32-5.37 (m, 411 NMR (CDCH), 3.76 (8, 311), 1.77 (8, 311), 6.32-5.37 (m, 411), 2.95 (8, 411), 7.18-7.24 (m, 111), 7.47-7.52 (m, 211)
	111), 6.30-0-40 (m, 211), 0.13-0-51 (m, 211), 0.63 (c), 111, 0.53 (c), 113, 1136, 1232, 1207, 1173, 1124, 1050, 1028 cm <sup>-1</sup> 1R (KBr) 3600-2800(br), 1626, 1609, 1631, 1493, 1460, 1444, 1388, 1345, 1232, 1207, 1173, 1124, 1060, 1028 cm <sup>-1</sup>
	mp 113-114 C
1.1172	
	mp 141-143 °C (CDCh) & 1.75 (d, J = 0.9 Hz, 3H), 1.78 (d, J = 0.9 Hz, 3H), 2.99 (e, 6H), 3.50 (e, 3H), 3.74 (e, 3H), 3.78 (d, J = 6.6
1.1173	اه ∹
	mp 226-228 °C ··· 3.93 (s, 3H), 4.95 (s, 1H), 6.21 (s, 2H), 6.90-6.94 (m, 2H), 6.96 (s, 1H), 6.97 (s, 1H), 7.03 (d, J = 0.9 Hz,
1.1174	1-1174 1H), 7.30-7.49 (m, 1H) IR (KBr) 3600-2800(br), 1608, 1589, 1520, 1471, 1446, 1384, 1358, 1270, 1250, 1238, 1210, 1172, 1141, 1093, 1031, 997
1.1176	mp 143-145 °C 1-1176 <sup>1</sup> H NMR (CDCl <sub>3</sub> ) δ 3.21 (s, 3H), 3.93 (s, 3H), 5.22 (s, 2H), 6.97 (s, 2H), 7.03 (s, 1H), 7.30-7.55 (m, 11H) 18 (KB-) 3600-2800(br), 1602, 1517, 1468, 1368, 1348, 1210, 1176, 1151, 1095, 1038, 989 cm <sup>-1</sup>

Table 233

50	45	40	35	30	25	20	15	10	5
-1176	mp 98-100 11 NMR (C 7.03 (m, 31 1R (KBr) 36	7 4	D, 1.79 (s, 3II 7.45 (s, 1H), 7. 83, 1619, 147	TC (19.1) \( \delta \) 1.76 (s, 3H), 1.79 (s, 3H), 3.21 (s, 3H), 3.91 (s, 3H), 4.65 (d, J = 6.9 Hz, 2H), 5.53-5.4 (l), 7.23-7.41 (m, 2H), 7.45 (s, 1H), 7.49 (s, 1H), 7.51-7.56 (m, 1H) (m, 2H), 7.45 (s, 1H), 7.49 (s, 1H), 7.51-7.56 (m, 1H)	3.91 (s, 3H), 1.7.56 (m, 1H) 1250, 1202, 1	4.65 (d, J = 6.9 ) 177, 1161, 109	Hz, 2H), 5.5 6, 1041, 972	1.76 (s, 311), 1.79 (s, 311), 3.21 (s, 3H), 3.91 (s, 3H), 4.65 (d, J = 6.9 Hz, 2H), 5.53-5.58 (m, 1H), 6.94-1 (m, 2H), 7.45 (s, 1H), 7.49 (s, 1H), 7.51-7.56 (m, 1H) ), 1604, 1583, 1519, 1470, 1449, 1365, 1260, 1202, 1177, 1161, 1095, 1041, 972 cm. 1	6.94-
1.1177	mp 118-120 111 NMR (C 7.23-7.37 (t	8 1.76 (s, 31) 7.44 (s, 111), 7. 0(br), 1626, 16	I), 1.79 (s, 3H) 46 (s, 1H) 09, 1526, 149	), 3.91 (s, 3H), 0, 1429, 1253 <sub>,</sub>	4.64 (d, .J = 6	.9 Hz, 2H), 6.6	3-5.58 (m, 1E	l), 6.88-7.02 (m,	bH).
F-1178	mp 161-164 ℃ HI NMR (CDCE) δ 3.00 (s, 3H), 3.79 (s, 3H), 3.80 (s, 3H), 6.78-6.83 (m, 2H), 6.90 (s, 1H), 6.97 (s, 1H), 7.47-7.52 (m, 2H), 7.71 (d, J = 1.8 Hz, 1H), 8.37 (d, J = 8.7 Hz, 1H), 8.46 (br s, 1H) IR (KBr) 3600-2800(br), 1716, 1613, 1632, 1505, 1487, 1463, 1384, 1357, 1280, 1195, 1172, 1059, 1033 cm <sup>-1</sup>	δ 3.00 (s, 3H , 1H), 8.37 (d, J 0(br), 1716, 16	[], 3.79 (s, 31]) ] = 8.7 11z, 111 [13, 1532, 150]	), 3.80 (s, 3H), ( )), 8.46 (br s, 11 5, 1487, 1463,	3.78-6.83 (m, : 1) 1384, 1367, 13	2H), 6.90 (s, 11 280, 1195, 117	H), 6.97 (s, 1F 2, 1059, 1033	l), 7.47.7.52 (m, cm <sup>-1</sup>	2H),
6.11.1	mp 135-137 111 NMR (C 111), 6.71 (c 1R (KBr) 30	δ 1.74 (a, 3H 4 Hz, 1H), 6.80 O(br), 1612, 15	(), 1.78 (s, 3H) )-6.83 (m, 2H) 32, 1495, 146	7 °C (1.74 (a, 311), 1.78 (a, 311), 3.00 (a, 6H), 3.78 (a, 3H), 3.79 (a, 3H), 4.29 (d, J = 6.6 Hz, 1H), J = 8.4 Hz, 1H), 6.80-6.83 (m, 2H), 6.90 (a, 1H), 6.94 (a, 1H), 7.38-7.42 (m, 1H), 7.48-7.56 (m, 31), 300-2800(br), 1612, 1532, 1495, 1460, 1444, 1385, 1365, 1273, 1257, 1203, 1059, 1039, 1029 cm <sup>-1</sup>	1.78 (s, 3H), 3. 3.94 (s, 1H), 7. 1365, 1273, 13	79 (s, 3H), 4.2 .38-7.42 (m, 11 257, 1203, 105	9 (d, J = 6.6 H H), 7.48-7.56 ( 9, 1039, 1029	(z, 1H), 5.35-5.4(m, 3H)	) (m,
-1180		δ 1.57 (d, J = H), 7.15 (s, 1H) (5, 1486, 1370,	6.3Hz, 3H), 2 , 7.23 (d.d, J = 1235, 1177, 1	UCl <sub>3</sub> ) δ 1.57 (d, J = 6.3Hz, 3H), 2.26 (e, 3H), 2.28 (e, 3H), 5.18 (e, 2H), 5.2 (e, 1H), 7.15 (e, 1H), 7.23 (d.d, J = 8.4 & 2.1 Hz, 1H), 7.30 · 7.51 (m, 10H), 57, 1605, 1486, 1370, 1235, 1177, 1149, 1078, 1017 cm <sup>-1</sup>	8 (8, 3H), 6.16 1H), 7.30 - 7. 7 cm <sup>-1</sup>	5 (s, 2H), 5.22 ( 51 (m, 10H)	(q, J = 6.3 Hz,	1H), 7.02 (d, J	4.8
1811-	<sup>1</sup> H NMR (CDCl <sub>3</sub> ) δ 1.66 (s, 6H), 2.27 (s, 3H), 2.28 (s, 3H), 3.20 (s, 3H), 4.22 (s, 1H), 5.22 (s, 2H), 7.06 (d, J = 8.4 Hz, 1H), 7.12 (s, 1H), 7.14 (s, 1H), 7.23 (d.d, J = 8.4 & 2.1Hz, 1H), 7.30 · 7.51 (m, 10H) <sup>1</sup> R (KBr)3544,3441, 1604, 1512, 1485, 1367, 1222, 1173, 1149 cm <sup>-1</sup>	δ 1.66 (s, 6H), s, 1H), 7.23 (d., i, 1604, 1512, 1	d, J = 8.4 & 2. 1485, 1367, 12	2.28 (s, 3H), 3. 1Hz, 1H), 7.30 22, 1173, 1149	.20 (s, 3H), 4. .7.51 (m, 10 cm. <sup>1</sup>	22 (s, 1H), 6.2 H)	2 (s, 2H), 7.06	i (d, J = 8.4 Hz,	1H).

Table 234

		11 NMR (CDC) <sub>3</sub> ) \$ 1.28 (t, J = 7.2Hz, 3H), 2.26 (s, 3H), 2.28 (s, 3H), 2.70 (q, J = 7.2Hz, 2H), 3.20 (s, 3H), 4.73 (s, 1H), 6.82
	1.1182	1-1182 (d, J = 8.4Hz, 111), 7.03 · 7.11 (m, 2H), 7.14 (s, 1H), 7.15 (s, 1H), 7.29 · 7.46 (m, 4H)
		IR (KBr) 3510, 1605, 1515, 1488, 1369, 1263, 1177, 1147, 1117 cm <sup>-1</sup>
I		111 NMR (CDCl3) 6 1.29 (d, J = 6.9Hz, 6H), 2.27 (s, 3H), 2.28 (s, 3H), 3.20 (s, 3H), 3.27 (qintet, J = 6.9Hz, 1H), 4.76 (s, 1H),
		6.81(d, J = 7.8112, 1H), 7.07(d.d, J = 7.8 & 2.1 Hz, 1H), 7.11 (s, 1H), 7.15 (s, 1H), 7.20 (d, J = 2.1Hz, 1H), 7.34 (d, J = 8.7Hz,
	1-1183	211), 7.42 (d, J = 8.711z, 211),
		IR (KBr) 3511, 1606, 1484, 1356, 1174, 1151 cm <sup>-1</sup>
L		1H NMR (CDC11) 6 1.23 (t, J = 8.1Hz, 3H), 1.77 (e, 3H), 1.82 (e, 3H), 2.26 (e, 3H), 2.29 (e, 3H), 2.70 (q, J = 8.1Hz, 2H), 3.20
		(s, 311), 4.58 (d, $J = 6.6 \text{ Hz}$ , 211), 5.48 · 5.57 (m, 1H), 6.90 (d, $J = 7.8 \text{ Hz}$ , 1H), 7.08 · 7.13 (m, 2H), 7.16 (s, 2H), 7.23 · 7.47 (m,
	1.1184	4H)
		(Br)
		1H NMR (CDCl <sub>3</sub> ) 6 1.23 (t, J = 7.5Hz, 3H), 1.76 (8, 3H), 1.81 (8, 3H), 2.27 (8, 3H), 2.29 (8, 3H), 2.70 (q, J = 7.5Hz, 2H),
	1.1185	1-1185 4.57 (d, J = 6.6 Hz, 2H), 4.79 (brs, 1H), 5.49 - 5.58 (m, 1H), 6.83 - 6.92 (m, 3H), 7.08 - 7.19 (m, 4H), 7.27 (.d, J = 8.4 Hz, 2H)
		IR (KBr) 3529, 1608, 1519, 1487, 1241, 1136, 1024 cm <sup>-1</sup>
<del></del>		1H NMR (CDCl <sub>3</sub> ) & 1.23 (d, J = 1.8Hz, 6H), 1.76 (g, 3H), 1.82 (g, 3H), 2.27 (g, 3H), 2.29 (g, 3H), 3.20 (g, 3H), 3.40 (quintet,
	1.1186	1.1186 J = 1.8Hz, 1H), 4.58 (d, J = 6.6 Hz, 2H), 5.48 - 5.59 (m, 1H), 6.90 (d, J = 7.8 Hz, 1H), 7.10 · 7.44 (m, 8H)
_		IR (KBr)1602, 1468, 1369, 1232, 1174, 1151 cm <sup>-1</sup>
<u> </u>		1H NMR (CDC13) & 1.24 (d, J = 6.9Hz, 6H), 1.76 (s, 3H), 1.81 (s, 3H), 2.27 (s, 3H), 2.29 (s, 3H), 3.40 (quintet, J = 6.9Hz,
		1H), $4.58$ (d, $J = 6.6$ Hz, 2H), $4.79$ (broad, s., 1H), $5.50 \cdot 5.57$ (m, 1H), $6.84 \cdot 6.93$ (m, 3H), $7.09 \cdot 7.16$ (m, 3H), $7.00 \cdot 7.28$
	1-1187	(m, 3H)
		1R (KBr) 3265, 1607, 1519, 1486, 1448, 1383, 1232, 1170 cm <sup>-1</sup>

Table 235

	1H NMH (CHCM.) 6 1.31 (d, J = 6.9Hz, 6H), 1.44 (s, 3H), 1.67 (s, 3H), 2.97 (quintet, J = 6.9Hz, 1H), 3.78 (s, 3H), 3.80 (s,
	3H), 3.92 (s, 3H), 4.20 · 4.30 (broad, 1H), 5.17 · 5.30 (m, 1H), 6.96 (s, 1H), 6.99 (s, 1H), 7.07 · 7.35 (m, 5H), 7.52 (d, J = 8.1
282	112, 211)
	IR (KBr) 3422, 1601, 1529, 1492, 1462, 1378, 1341, 1267, 1203, 1138, 1028 cm <sup>-1</sup>
	1H NMR (CDCl3) & 2.67 (8, 3H), 3.13 (8, 3H), 3.57 (8, 3H), 3.79 (8, 3H), 5.19 (8, 2H), 6.84 (8, 1H), 7.15 (d, J = 9.0 Hz, 1H),
1.1189	7.31 - 7.50 (m, 811), 7.55 (d.d, $J = 12.0 \& 1.8 \text{ Hz}$ , 111), 8.34 - 8.41 (m, 111)
	IR (KBr)3428, 1740, 1601, 1535, 1482, 1366, 1292, 1238, 1177, 1164, 1112, 1079, 1013cm <sup>-1</sup>
	11 NMR (CDCl3) & 1.48 (s, 3H), 1.70 (s, 3H), 1.77 (s, 3H), 1.81 (s, 3H), 2.70 (s, 3H), 3.24 (s, 3H), 3.55 (s, 3H), 3.81 (s,
1-1190	1-1190 3H), 4.09 - 4.20 (m, 1H), 4.53 - 4.68 (m, 3H), 5.18 - 5.30 (m, 1H), 5.43 - 5.54 (m, 1H), 6.86 (s, 1H), 7.06 - 7.51 (m, 6H)
	IR (KBr) 1702, 1521, 1482, 1367, 1204, 1177, 1115, 1080 cm <sup>-1</sup>
	1H NMR (CDCl3) & 1.75 (9, 6H), 1.78 (9, 3H), 1.82 (8, 3H), 3.49 (8, 3H), 3.74 (8, 3H), 3.79 (d, J = 6.3Hz, 2H), 4.61 (d, J =
	6.6Hz, 2H), 5.32 - 5.43 (m, 1H), 5.49 - 5.57 (m, 1H), 5.68 (s, 1H), 5.90 (s, 1H), 6.44 (s, 1H), 6.74 - 6.85 (m, 1H), 6.95 (s, 2H),
1.1191	7.05 (s, 1H), 7.29 - 7.38 (m, 2H)
	IR (KBr) 3527, 1624, 1530, 1491, 1248, 1221, 1197, 1126, 1105, 1072 cm <sup>-1</sup>
	<sup>1</sup> H NMR (CDCl <sub>3</sub> ) $\delta$ 1.75 (8, 3H), 1.78 (8, 3H), 3.49 (8, 3H), 3.73 (6, 3H), 3.78 (d, $J = 6.9$ Hz, 2H), 5.32 $\cdot$ 5.43 (m, 1H),
1.1192	1-1192 6.44 (s, 111), 6.73 · 6.97 (m, 4H), 7.26 · 7.37 (m, 2H)
	IR (KBr)3551,3437,3310, 1607, 1529, 1491, 1463, 1402, 1362, 1269, 1255, 1184, 1099,1070, 1013 cm <sup>-1</sup>
	1H NMR (CDC13) & 2.28 (8, 3H), 2.30 (8, 3H), 3.00 (6, 6H), 5.16 (8, 2H), 5.69 (8, 1H), 6.80 (d, J = 8.7 Hz, 2H), 6.84 (d.d,
	J = 8.1 & 2.1 Hz, 1H), 6.98 (.d, J = 8.1Hz, 1H), 6.99 (d, J = 2.1 Hz, 1H), 7.12(e, 1H), 7.13 (e, 1H), 7.27 (d, J = 8.7Hz, 2H),
5611-1	7.34 - 7.50 (m, 5H)
	IR (KBr)1605, 1525, 1490, 1417, 1242, 1199, 1127, 1006 cm. <sup>1</sup>

Table 236

1.1194	mp 174-175 °C. HI NMR (CDCLs) & 3.48 (s, 3H), 3.78 (s, 3H), 4.41 (s, 4H), 5.17 (s, 2H), 5.71 (s, 1H), 5.88 (s, 1H), 6.48 (s, 1H), 6.94-7.50 (m, 18H), 7.86 (Alq., J = 8.4 Hz, 4H)
1.1196	III (MRF) 3403, 3403, 1035, 1035, 1037, 10
1.1196	
1.1197	
1-1198	oil NMR (CDCl <sub>3</sub> ) & 1.45 (e, 3H), 1.66 (e, 3H), 1.87 (e, 3H), 2.24 (e, 3H), 2.27 (e, 3H), 2.30 (e, 3H), 3.84 (e, 3H), 3.92 (e, 3H), 3.95 (e, 3H), 4.50-4.58 (m, 1H), 5.22-5.29 (m, 1H), 6.87-6.99 (m, 4H), 7.09-7.17 (m, 3H), 7.80 (e, 1H), 8.34-8.42 (m, 1H) IR (CHCl <sub>3</sub> ) 3673, 3021, 1685, 1639, 1625, 1495, 1406, 1237, 1128, 1037 cm <sup>-1</sup>

Table 237

10	0-4.69	= 8.4 [	= 6.6 H	2H), 7.	= 6.9 F
	79 °C (CICL <sub>II</sub> ) & 1.45 (s, GH), 1.66 (s, GH), 1.87 (s, GH), 2.29 (s, GH), 3.85 (s, GH), 3.95-4.04 (m, 2H), 4.50-4.59 (m, 2H), (m, 2H), 6.90-6.95 (m, 4H), 7.10-7.15 (m, 2H), 7.19 (s, 2H)  (m, 2H), 6.90-6.95 (m, 4H), 7.10-7.15 (m, 8H), 7.19 (s, 2H)	26 °C. (CDCl <sub>3</sub> )	CDCL <sub>13</sub> ) & 1.77 (s, 31!), 1.82 (s, 31!), 2.80 (s, 31!), 3.21 (s, 31!), 3.56 (s, 31!), 3.79 (s, 31!), 4.67 (d, J = 6.6 Hz, 2H), (m, 1H), 6.84 (s, 1H), 7.05 (d, J = 8.1 Hz, 1H), 7.22-7.26 (m, 1H), 7.36-7.41 (m, 2H), 7.67-7.71 (m, 2H), 8.35 (d, J = 1), 9.24 (s, 1H)  (b) 9.24 (s, 1H)  3385, 2937, 1718, 1532, 1479, 1362, 1175, 1152, 1078, 973, 876, 797, 526 cm <sup>-1</sup>	mp 260-262 °C  H NMR (DMSO) δ 2.27 (a, 6H), 3.87 (a, 6H), 7.00 (dd, J = 1.8, 8.1 Hz, 2H), 7.10 (d, J = 1.8 Hz, 2H), 7.21 (a, 2H), 7.48 (d, J = 8.1 Hz, 2H), 10.73 (a, 2H)  = 8.1 Hz, 2H), 10.73 (a, 2H)  IR (KBr) 3392, 3008, 1719, 1600, 1642, 1413, 1297, 1168, 1032, 906, 627 cm <sup>-1</sup>	mp 143·144 °C 14 NMR (CDCl <sub>3</sub> )
15	16-4.04 (m	35 (s, 1H), 1), 8.96 (s 4 cm <sup>-1</sup>	79 (8, 3H), 2H), 7.67-	1.8 Hz, 2F	17 (s, 3H), 1081, 1010
20	1, 611), 3.9	, 111), 6.8 2.1 Hz, 11 1, 798, 52	, 3H), 3.7 7.41 (m, 5 26 cm <sup>.1</sup>	= f 'p) 0:	, 3H), 3.8 8, 1109, 1
	I), 3.86 (e	mp 224-226 °C. 4H NMR (CDCl <sub>3</sub> )	powder 1H NMR (CDCl <sub>3</sub> )	z, 2H), 7.1	1), 3.73 (s l) 1249, 117
25	2.29 (s, 6l (s, 2H) cm <sup>-1</sup>	3.78 (s, 31 , 211), 7.9 77, 1148,	3.21 (s, 3l 7.26 (m, 3	.8, 8.1 H. 32, 905, 6	1.67 (e, 3F : 9 Hz, 2H 39, 1284,
30 ·	(s, 6H), 3 2H), 7.19 869, 829	(s, 3H), 15-7.72 (m	(s, 3H), 3H), 7.22-	(dd, J = 1158, 10	(s, 3H), ; .54 (d, J = 1456, 13
	GH), 1.87 7.15 (m, 3	311), 3.54 1, 211), 7.6 08, 1481,	3H), 2.80 = 8.1 Hz, 62, 1175,	6H), 7.00	3H), 3.61 m, 5H), 7 19, 1479,
35	1.66 (s, 111), 7.10.	6-7.42 (m. 1729, 16	), 1.82 (s,) (o5 (d, J =) 1479, 13	), 3.87 (s, 1542, 14	, 1.82 (s, .86-7.02 (
40	15 (s, GH) 6.95 (m, '	88 (s, 3H) , 1H), 7.3 [24, 2938]	77 (s, 3H) (s, 1H), 7 )	27 (s, 6H) 2H) 19, 1600,	76 (s, 3H) (s, 1H), 6. 73, 1609,
	mp 177-179 °C 1H NMR (CDCL) & 1.45 (s, GH), 1.66 (s, GH), 1.87 (s, GH), 2.29 (s, 6.23-5.29 (m, 2H), 6.90-6.95 (m, 4H), 7.10-7.15 (m, 2H), 7.19 (s, 2H) IR (KBr) 2929, 1661, 1492, 1405, 1288, 1214, 1030, 869, 829 cm <sup>-1</sup>	1 <sub>14</sub> ) δ 2 1, 8.4 Hz 3370, 30	powder IH NMR (CDCl <sub>3</sub> ) & 1.7 5.46-5.51 (m, 1H), 6.84 ( 1.8 Hz, 1H), 9.24 (s, 1H) IR (KBr) 3385, 2937, 17	mp 260-262 °C <sup>1</sup> H NMR (DMSO) & 2.27 (s, 6H), 3.87 (s, 6H), 7.00 (dd, J = 1.8, 8.1 Hz, 2H), 7 = 8.1 Hz, 2H), 10.73 (s, 2H) <sup>1</sup> H NMR (KBr) 3392, 3008, 1719, 1600, 1542, 1413, 1297, 1158, 1032, 905, 627 cm. <sup>1</sup>	14 °C CDCl <sub>3</sub> )
45		mp 224-226 °C 411 NMR (CDC) 7.20 (dd, J = 2. 1R (KBr) 3441,	O - II 63	mp 260-262 °C 1H NMR (DMS) = 8.1 Hz, 2H), 1 1R (KBr) 3392,	43-144 °C MR (CDC) 5.58 (m, 11 Br) 3494,
50					
	1.1199	0071-1	1.1201	1.1202	[-1203

Table 238

nnp 90-91 °C  11 NMR (CHCh) 32673, 3013, 2276 (a, 611), 4.69 (d, J = 7.2 Hz, 2H), 4.9-6.0 (brs, 1H), 5.67 (t, J = 7.2 Hz, 11 NMR (CHCh) 32673, 3013, 2979, 2928, 1676, 1584, 1621, 1492, 1232, 1034, 960, 848, 825 cm <sup>-1</sup> 11 (K(Hr) 32673, 3013, 2979, 2928, 1676, 1584, 1621, 1492, 1232, 1034, 960, 848, 825 cm <sup>-1</sup> 11 (K(Hr) 32673, 3013, 2979, 2928, 1676, 1584, 1621, 1621, 1622, 1034, 960, 848, 825 cm <sup>-1</sup> 11 (K(Hr) 32673, 3013, 2979, 2928, 1676, 1584, 1631, 1632, 1031, 3.76 (a, 3H), 4.86 (d, J = 6.9 Hz, 2H), 4.9-6.1 (brs, 1H), 5.68 (t, J H), 6.90 (brs, 1H), 6.09 (brs, 1H), 6.17 (a, 1H), 6.17 (a, 1H), 6.17 (a, 2H), 6.17 (a, 3H), 1.79 (a, 3H), 1.730, 7.50 (m, 9H)  11 (K(Hr) 1628, 1479, 1453, 1384, 1326, 1262, 1243, 1223, 1209, 1776, 1116, 1137, 963, 870, 846, 764 cm <sup>-1</sup> 11 (K(Hr) 1628, 1479, 1488, 1489, 1489, 1384, 1287, 1263, 1176, 999, 979 cm <sup>-1</sup> 11 (K(Hr) 1628, 1479, 1488, 1489, 1384, 1287, 1263, 1288, 1176, 999, 979 cm <sup>-1</sup> 11 (K(Hr) 1628, 1479, 1488, 1489, 1384, 1287, 1263, 1285, 1176, 999, 979 cm <sup>-1</sup> 11 (K(Hr) 1628, 1479, 1488, 1489, 1384, 1287, 1283, 1287, 1285, 1177, 22 (m, 2H), 7.27.7.31 (m, 2H), 7.20.7.49 (m, 1H), 6.79 (d, J = 2.1 Hz, 1H), 6.88 c.93 (m, 2H), 6.93 (d, J = 8.1 Hz, 1H), 7.17.7.22 (m, 2H), 7.17.7.22 (m, 2H), 7.20.7.49 (m, 1H), 111, 6.79 (d, J = 2.1 Hz, 1H), 6.88 c.93 (m, 2H), 6.93 (d, J = 8.1 Hz, 1H), 7.17.7.22 (m, 2H), 7.17.7.22 (m, 2H), 7.20.7.49 (m, 1H), 111, 6.79 (d, J = 2.1 Hz, 1H), 6.88 c.93 (m, 2H), 6.93 (1263, 1262, 1212, 1143, 997, 761 cm <sup>-1</sup> 11 (K(Hz) 3408, 1611, 1626, 1479, 1463, 1455, 1362, 1262, 1262, 1212, 1143, 997, 761 cm <sup>-1</sup> 11 (K(Hz) 3408, 1611, 1626, 1479, 1463, 1455, 1362, 1262, 1222, 1212, 12		
IR (KBr.) 3253, 3013, 2979, 2928, 1676, 1584, 1521, 1492, 1232, 1034, 950, 848, 825 cm <sup>-1</sup>     IR (KBr.) 3253, 3013, 2979, 2928, 1676, 1584, 1521, 1492, 1232, 1034, 950, 848, 825 cm <sup>-1</sup>     IR (KBr.) 3428, 2951, 2932, 1671, 1611, 1523, 1491, 1402, 1233, 1111, 1077, 1027, 969, 833 cm <sup>-1</sup>     IR (KBr.) 3428, 2951, 2932, 1671, 1611, 1523, 1491, 1402, 1233, 1111, 1077, 1027, 969, 833 cm <sup>-1</sup>     IR (KBr.) 3428, 2951, 2932, 1671, 1611, 1523, 1491, 1402, 1233, 1111, 1077, 1027, 969, 833 cm <sup>-1</sup>     IR (KBr.) 1992	1.124	ntp 90-91 °C. 111 NMR (CDCh) \$\delta\$ 1.72 (s, 3H), 1.79 (s, 3H), 2.26 (s, 6H), 4.69 (d, J = 7.2 Hz, 2H), 4.9-5.0 (brs, 1H), 5.57 (t, J = 7.2 Hz, 1H), 6.85-7.0 (m, 4H), 7.10 (d, J = 8.7 Hz, 2H), 4.8-7.1 (h, J = 8.7 Hz, 2H)
mp 131-132 C 11 NMR (CIDCIs) 6 1.73 (s, 311), 1.79 (s, 311), 3.43 (s, 311), 4.68 (d, J = 6.9 Hz, 2H), 4.9-f 11 NMR (CIDCIs) 6 1.73 (s, 111), 6.92 (d, J = 8.4 Hz, 211), 7.0-7.1 (m, 211), 7.52 (d, J = 8.4 Hz, 117, 1027, 10		IR (KBr) 3253, 3013, 2979, 2928, 1676; 1584, 1521, 1492, 1232, 1034, 950, 848, 825 cm <sup>-1</sup>
11.1205 11.1206 12.110, 6.09 (brs. 1H), 6.44 (s. 1H), 6.92 (d. J = 8.4 Hz, 2H), 7.07.1 (m, 2H), 7.62 (d. J = 8.4 Hz 11. (KHr) 3428, 2951, 2932, 1671, 1611, 1623, 1491, 1402, 1233, 1111, 1077, 1027, 969, 833 cm <sup>-1</sup> 11. (KHr) 3428, 2951, 2932, 1671, 1611, 1623, 1491, 1402, 1233, 1111, 1077, 1027, 969, 833 cm <sup>-1</sup> 11. (KHr) 3428, 2951, 2932, 1671, 1611, 1523, 1491, 1402, 1233, 1111, 1077, 1027, 969, 833 cm <sup>-1</sup> 11. (KHr) 3428, 2951, 2932, 1671, 1611, 1523, 1491, 1402, 1233, 1111, 1077, 1027, 969, 833 cm <sup>-1</sup> 11. NMR (CDCl.), 6 2.15 (s. 6H), 3.22 (s. 3H), 3.87 (s. 3H), 5.18 (AB q, J = 12.0 Hz, 2H), 6.74 (dd, J = 1.1206		3 TH 131-135
1.120    1.120    2.2   12, 111, 6.09 (brs. 111), 6.14 (s, 111), 6.92 (d, J = 8.4   12, 211), 7.0.7.1 (m, 211), 7.52 (d, J = 8.4   12, 111, 1077, 1027, 969, 833 cm <sup>-1</sup>   IR (KBr) 3428, 2951, 2932, 1671, 1611, 1623, 1491, 1402, 1233, 1111, 1077, 1027, 969, 833 cm <sup>-1</sup>   Im (191-192 °C   111   111, 111, 111, 111, 111, 111,		111 NMR (CDCE) $\delta$ 1.73 (8, 311), 1.79 (8, 311), 3.43 (8, 311), 3.76 (8, 311), 4.68 (d, $J = 6.9$ Hz, 2H), 4.9-5.1 (brs, 1H), 5.58 (t, $J = 6.9$ Hz, 2H), 4.9-5.1 (brs, 1H), 5.58 (t, $J = 6.9$ Hz, 2H), 4.9-5.1 (brs, 1H), 5.58 (t, $J = 6.9$ Hz, 2H), 4.9-5.1 (brs, 1H), 5.58 (t, $J = 6.9$ Hz, 2H), 4.9-5.1 (brs, 1H), 5.58 (t, $J = 6.9$ Hz, 2H), 4.9-5.1 (brs, 1H), 5.58 (t, $J = 6.9$ Hz, 2H), 4.9-5.1 (brs, 1H), 5.58 (t, $J = 6.9$ Hz, 2H), 4.9-5.1 (brs, 1H), 5.58 (t, $J = 6.9$ Hz, 2H), 4.9-5.1 (brs, 1H), 5.58 (t, $J = 6.9$ Hz, 2H), 4.9-5.1 (brs, 1H), 5.58 (t, $J = 6.9$ Hz, 2H), 4.9-5.1 (brs, 1H), 5.58 (t, $J = 6.9$ Hz, 2H), 4.9-5.1 (brs, 1H), 5.58 (t, $J = 6.9$ Hz, 2H), 4.9-5.1 (brs, 1H), 5.58 (t, $J = 6.9$ Hz, 2H), 4.9-5.1 (brs, 1H), 5.58 (t, $J = 6.9$ Hz, 2H), 4.9-5.1 (brs, 1H), 5.58 (t, $J = 6.9$ Hz, 2H), 4.9-5.1 (brs, 1H), 5.58 (t, $J = 6.9$ Hz, 2H), 4.9-5.1 (brs, 1H), 5.58 (t, $J = 6.9$ Hz, 2H), 4.9-5.1 (brs, 1H), 5.58 (t, $J = 6.9$ Hz, 2H), 4.9-5.1 (brs, 1H), 5.58 (t, $J = 6.9$ Hz, 2H), 4.9-5.1 (brs, 1H), 5.88 (t, $J = 6.9$ Hz, 2H), 4.9-5.1 (brs, 1H), 5.88 (t, $J = 6.9$ Hz, 2H), 4.9-5.1 (brs, 1H), 4
IR ((KBr) 3428, 2951, 2932, 1671, 1611, 1523, 1491, 1402, 1233, 1111, 1077, 1027, 969, 833 cm <sup>-1</sup> IIR (KBr) 192 °C  III NMR (CDCL <sub>13</sub> ) \$ 2.15 (s, 6H), 3.22 (s, 3H), 3.87 (s, 3H), 5.18 (AB q, J = 12.0 Hz, 2H), 6.74 (dd, J = 1.1206  IR (KBr) 1628, 1479, 1453, 1364, 1326, 1262, 1243, 1223, 1209, 1200, 1176, 1162, 1137, 963, 870, 846  IR (KBr) 1628, 1479, 1453, 1364, 1326, 1262, 1243, 1223, 1209, 1200, 1176, 1162, 1137, 963, 870, 846  IR (KBr) 1628, 1479, 1453, 1364, 1326, 1262, 1243, 1223, 1209, 1200, 1176, 1162, 1137, 963, 870, 846  IR (KBr) 3349, 1608, 1520, 1488, 1439, 1383, 1287, 1263, 1176, 999, 979 cm <sup>-1</sup> IR (KBr) 3349, 1608, 1520, 1488, 1439, 1383, 1287, 1263, 1176, 999, 979 cm <sup>-1</sup> IR (KBr) 3408, 1611, 1626, 1479, 1463, 1465, 1382, 1263, 1242, 1225, 1212, 1143, 997, 751 cm <sup>-1</sup> IR (KBr) 3408, 1611, 1626, 1479, 1463, 1465, 1382, 1263, 1242, 1225, 1212, 1143, 997, 751 cm <sup>-1</sup>	1-1205	= 7.2 Hz, 111), 6.09 (brs, 111), 6.44 (s, 111), 6.92 (d, J = 8.4 Hz, 211), 7.0-7.1 (m, 211), 7.52 (d, J = 8.4 Hz, 211)
mp 191-192 °C  iii NMR (CDCl <sub>3</sub> ) 6 2.15 (9, 6H), 3.22 (9, 3H), 5.18 (AB q, J = 12.0 Hz, 2H), 6.74 (dd, J = 1.1206  iii NMR (CDCl <sub>3</sub> ) 6 2.15 (9, 6H), 3.22 (9, 3H), 7.24 (9, 1H), 7.30-7.60 (m, 9H)  IR (KBr) 1628, 1479, 1453, 1364, 1326, 1262, 1243, 1223, 1209, 1200, 1176, 1162, 1137, 963, 870, 846  mp 108-109 °C  iii NMR (CDCl <sub>3</sub> ) 6 1.77 (9, 3H), 1.82 (d, J = 0.6 Hz, 3H), 2.27 (9, 3H), 2.28 (9, 3H), 4.56 (d, J = 6.6		IR (KBr) 3428, 2951, 2932, 1671, 1611, 1523, 1491, 1402, 1233, 1111, 1077, 1027, 969, 833 cm <sup>-1</sup>
1.1206 (d, J = 2.1 Hz, 1H), 6.93 (d, J = 8.1 Hz, 1H), 7.24 (a, 1H), 7.30-7.60 (m, 9H)  IR (KBr) 1628, 1479, 1453, 1364, 1326, 1262, 1243, 1223, 1209, 1200, 1176, 1162, 1137, 963, 870, 846  IR (KBr) 1628, 1479, 1453, 1364, 1326, 1262, 1243, 1223, 1209, 1200, 1176, 1162, 1137, 963, 870, 846  IR (KBr) 1628, 1479, 1453, 1364, 1326, 1262, 1243, 1223, 1209, 1200, 1176, 1162, 1137, 963, 870, 846  III NMR (CDCl <sub>3</sub> ) & 1.77 (s, 3H), 1.82 (d, J = 0.6 Hz, 3H), 2.27 (s, 3H), 2.28 (s, 3H), 4.56 (d, J = 6.6 + 110, 111), 6.86-6.92 (m, 2H), 6.94-7.00 (m, 2H), 7.12 (s, 1H), 7.13 (s, 1H), 7.22-7.27 (m, 2H), 7.27-7  IR (KBr) 3349, 1608, 1520, 1488, 1439, 1383, 1287, 1263, 1236, 1175, 999, 979 cm <sup>-1</sup> IR (KBr) 3408, 1611, 1526, 1479, 1463, 1455, 1382, 1263, 1242, 1225, 1212, 1143, 997, 751 cm <sup>-1</sup> IR (KBr) 3408, 1611, 1526, 1479, 1463, 1455, 1382, 1263, 1242, 1225, 1212, 1143, 997, 751 cm <sup>-1</sup>		mp 191-192 °C
1-1206 (d, J = 2.1 Hz, 1H), 6.93 (d, J = 8.1 Hz, 1H), 7.24 (s, 1H), 7.30-7.60 (m, 9H)  IR (KBr) 1528, 1479, 1453, 1364, 1326, 1262, 1243, 1223, 1209, 1200, 1176, 1162, 1137, 963, 870, 846  mp 108-109 °C  iii NMR (CDCl <sub>3</sub> ) 6 1.77 (s, 3H), 1.82 (d, J = 0.6 Hz, 3H), 2.27 (s, 3H), 2.28 (s, 3H), 4.56 (d, J = 6.6 li, 1H) N.12 (s, 1H), 7.13 (s, 1H), 7.22-7.27 (m, 2H), 7.27-7  IR (KBr) 3349, 1608, 1520, 1488, 1439, 1383, 1287, 1263, 1235, 1175, 999, 979 cm <sup>-1</sup> mp 194-195 °C  iii NMR (CDCl <sub>3</sub> ) 6 2.14 (s, 3H), 2.16 (s, 3H), 3.87 (s, 3H), 4.97 (s, 1H), 5.17 (AB q, J = 12.6 Hz, 2H)  l-1208 Hz, 1H), 6.79 (d, J = 2.1 Hz, 1H), 6.88-6.93 (m, 2H), 6.93 (d, J = 8.1 Hz, 1H), 7.17-7.22 (m, 2H), 7.24  5H)  IR (KBr) 3408, 1611, 1626, 1479, 1463, 1455, 1382, 1263, 1242, 1225, 1212, 1143, 997, 751 cm <sup>-1</sup>		
	1.1206	
	,	IR (KBr) 1628, 1479, 1453, 1364, 1326, 1262, 1243, 1223, 1209, 1200, 1176, 1162, 1137, 963, 870, 846, 754 cm <sup>-1</sup>
		mp 108-109 °C
IR (KBr) 3349, 1608, 1520, 1488, 1439, 1383, 1287, 1263, 1235, 1175, 999, 979 cm <sup>-1</sup> mp 194·195 °C  iH NMR (CDCl <sub>3</sub> )	1.1207	
mp 194-195 °C  1H NMR (CDCl <sub>3</sub> ) δ 2.14 (8, 3H), 2.16 (8, 3H), 3.87 (8, 3H), 4.97 (8, 1H), 5.17 (AB q, J= 12.6 Hz, 2H)  1-1208 Hz, 1H), 6.79 (d, J = 2.1 Hz, 1H), 6.88-6.93 (m, 2H), 6.93 (d, J = 8.1 Hz, 1H), 7.17-7.22 (m, 2H), 7.24  5H)  1R (KBr) 3408, 1611, 1526, 1479, 1463, 1455, 1382, 1263, 1242, 1225, 1212, 1143, 997, 751 cm <sup>-1</sup>		IR (KBr) 3349, 1608, 1520, 1488, 1439, 1383, 1287, 1263, 1235, 1175, 999, 979 cm <sup>-1</sup>
1H NMR (CDCl <sub>3</sub> ) 6 2.14 (8, 3H), 2.16 (8, 3H), 3.87 (8, 3H), 4.97 (8, 1H), 5.17 (AB q, J = 12.6 Hz, 2H) 1.1208 Hz, 1H), 6.79 (d, J = 2.1 Hz, 1H), 6.88-6.93 (m, 2H), 6.93 (d, J = 8.1 Hz, 1H), 7.17-7.22 (m, 2H), 7.24 5H)  5H)  1R (KBr) 3408, 1611, 1526, 1479, 1463, 1455, 1382, 1263, 1242, 1225, 1212, 1143, 997, 751 cm <sup>-1</sup>		mp 194-195 °C
1.1208 Hz, 111), 6.79 (d, J = 2.1 Hz, 1H), 6.88-6.93 (m, 2H), 6.93 (d, J = 8.1 Hz, 1H), 7.17-7.22 (m, 2H), 7.24 5H)  5H)  1R (KBr) 3408, 1611, 1526, 1479, 1463, 1455, 1382, 1263, 1242, 1225, 1212, 1143, 997, 751 cm <sup>-1</sup>		14 NMR (CDC13) $\delta$ 2.14 (8, 3H), 2.16 (8, 3H), 3.87 (8, 3H), 4.97 (8, 1H), 5.17 (AB q, $J = 12.6$ Hz, 2H), 6.74 (dd, $J = 2.1$ , 8.1
6H) 1R (KBr) 3408, 1611, 1526, 1479, 1463, 1455, 1382, 1263, 1242, 1225, 1212, 1143, 997, 751 cm <sup>-1</sup>	1.1208	Hz, 111), 6.79 (d, J = 2.1 Hz, 1H), 6.88-6.93 (m, 2H), 6.93 (d, J = 8.1 Hz, 1H), 7.17-7.22 (m, 2H), 7.24 (e, 1H), 7.29-7.49 (m,
IR (KBr) 3408, 1611, 1526, 1479, 1463, 1455, 1382, 1263, 1242, 1225, 1212, 1143, 997, 751 cm.		(H)
		IR (KBr) 3408, 1611, 1526, 1479, 1463, 1455, 1382, 1263, 1242, 1225, 1212, 1143, 997, 751 cm.1

Table 239

1.1209	mp 183-184 °C <sup>1</sup> H NMR (CDCh.)
1.1210	mp 133-134 °C III NMR (CDCh,) & 1.75 (a, 3H), 1.80 (a, 3H), 2.16 (a, 3H), 2.17 (a, 3H), 3.22 (a, 3H), 3.85 (a, 3H), 4.61 (d, J = 6.9 Hz, 2H), 5.55 (m, 1H), 6.74-6.79 (m, 2H), 6.92 (d, J = 8.7 Hz, 1H), 7.24 (a, 1H), 7.39 (a, 4H) IR (KBr) 1529, 1516, 1478, 1371, 1353, 1328, 1263, 1242, 1201, 1176, 1150, 975, 866, 846, 787 cm <sup>-1</sup>
1.1211	mp 243-244 °C  'HI NMR (I)MSOd <sub>6</sub> ) $\delta$ 1.91 (s, 3H), 1.96 (s, 3H), 3.77 (s, 3H), 4.05 (br s, 2H), 5.12 (s, 2H), 6.40 (s, 1H), 6.71 (dd, $J = 1.8, 8.1$ 1-1211   Hz, 1H), 6.77-6.84 (m, 3H), 7.06-7.12 (m, 2H), 7.16 (d, $J = 8.1$ Hz, 1H), 7.32-7.52 (m, 5H), 9.38 (s, 1H)  IR (KBr) 3378, 3289, 1609, 1586, 1518, 1483, 1454, 1402, 1267, 1236, 1207, 1171, 1136, 1024, 863, 836, 816, 753, 730, 695 cm. <sup>1</sup>
1.1212	mp 195-196 °C. 41 NMR (CDCt <sub>1</sub> ) & 1.75 (s, 3H), 1.79 (s, 3H), 2.15 (s, 3H), 2.16 (s, 3H), 3.85 (s, 3H), 4.61 (d, J = 6.9 Hz, 2H), 4.97 (s, 1H), 6.55 (m, 1H), 6.76-6.79 (m, 2H), 6.89-6.94 (m, 3H), 7.18-7.23 (m, 2H), 7.24 (s, 1H) 1R (KBr) 3462, 1611, 1519, 1479, 1459, 1431, 1379, 1271, 1240, 1228, 1211, 1137, 983, 835 cm <sup>-1</sup>
1.1213	I. 1213 IR (KBr) 3275, 1494, 1462, 1444, 1387, 1371, 1232, 1212, 1183, 1141 cm <sup>-1</sup> mp 106-108 °C I. 124 'H NMR (CDCl <sub>3</sub> ) 6 2.24 (s, 3H), 3.79 (s, 3H), 4.72 (br, 1H), 5.20 (s, 2H), 6.72-7.18 (m, 8H), 7.36-7.50 (m, 6H) IR (CHCl <sub>3</sub> ) 3596, 1610, 1523, 1493, 1465, 1465, 1388, 1318, 1298, 1262, 1173, 1127, 1038, 834 cm <sup>-1</sup>

Table 240

,	mp 108-110 C
	111 NMR (CDCE) $\delta$ 1.77 (a, 3H), 1.82 (a, 3H), 2.25 (a, 3H), 3.79 (a, 3H), 4.63-4.65 (d, $J=7.2$ Hz, 2H), 5.56 (a, 2H), 6.81 (a,
1-1215	111), 6.87-7.18 (m, GH), 7.44-7.47 (m, 2H)
	1R (CHCB) 3596, 2937, 1610, 1523, 1493, 1465, 1446, 1387, 1297, 1261, 1173, 1125, 1038, 993, 834 cm <sup>-1</sup>
	mp 121.122 С
	111 NMR (CDCE) & 2.24 (8, 3H), 3.79 (8, 3H), 4.78-4.80 (d, J = 6.9 Hz, 2H), 6.24 (t, J = 6.9 Hz, 1H), 6.80 (8, 1H), 6.87-7.19
9171	(m, 6H), 7.43-7.48 (m, 2H)
	IR (CHCla) 3596, 1612, 1523, 1493, 1464, 1389, 1300, 1269, 1173, 1127, 1038, 886, 834 cm <sup>-1</sup>
	mp 163-165 C
	1H NMR (CIUCL3) 6 2.26 (8, 3H), 2.28 (8, 3H), 4.78 (br s, 1H), 4.78 (d, J =6.5 Hz, 2H), 5.60 (8, 1H) 6.23 (t, J =6.5 Hz, 1H),
1.1217	6.83-6.92 (m, 4H), 6.99 (d, J = 2.1 Hz, 1H), 7.10 (s, 1H), 7.11 (s, 1H), 7.22-7.27 (m, 2H)
	IR (CHCl <sub>3</sub> ) 3597, 3548, 3027, 3010, 1613, 1588, 1522, 1490, 1218, 1208, 1171 cm <sup>-1</sup>
	foum
	MR (CI
	3.7, 0.7 Hz, 1H), 6.96 (dd, J = 8.4, 2.1 Hz, 1H), 7.03 (d, J = 8.4 Hz, 1H), 7.09 (d, J = 2.1 Hz, 1H), 7.26 (dd, J = 8.6, 0.7 Hz,
1.1218	2H), 7.37-7.45 (m, 5H), 7.60 (dd, $J = 8.7$ , 1.5 Hz, 1H), 7.61 (d, $J = 3.7$ Hz, 1H), 7.78 (d, $J = 1.5$ Hz, 1H), 7.82 (d, $J = 8.6$ Hz,
	1H), 8.05 (d, J = 8.7 Hz, 1H)
	IR (KBr) 3476, 1457, 1371, 1254, 1107, 1131, 1107, 1011, 814, 686, 581 cm <sup>-1</sup>
	mp 217.219 C
1.1219	6.86 (8, 111), 7.15 (d, J = 8.4 Hz, 1H), 7.26 (d, J = 8.7 Hz, 2H), 7.32.7.48 (m, 7H), 7.56 (dd, J = 8.7, 1.8 Hz, 1H), 7.61 (d, J =
	3.8 Hz, 1H), 7.78 (d, J = 1.8 Hz, 1H), 7.82 (d, J = 8.7 Hz, 1H), 8.05 (d, J = 8.7 Hz, 1H)
	IR (KBr) 1366, 1174, 1079, 963, 814, 685, 586 cm <sup>-1</sup>

Table 241

	mp 208-210 ℃
	111 NMR (CDCE) $\delta$ 2.37 (8, 311), 2.72 (8, 311), 3.23 (8, 311), 3.47 (8, 311), 3.76 (8, 311), 4.63 (4, $J = 6.6$ Hz, 2H), 5.49 (t, $J = 6.6$
•	Hz, 1H), 6.71 (d, J = 3.8 Hz, 1H), 6.86 (s, 1H), 7.09 (d, J = 8.4 Hz, 1H), 7.26 (d, J = 8.3 Hz, 2H), 7.35 (dd, J = 8.4, 2.1 Hz, 1H),
0221-1	7.40 (d, J = 2.1 Hz, 1H), 7.56 (dd, J = 8.4, 1.7 Hz, 1H), 7.61 (d, J = 3.8 Hz, 1H), 7.78 (d, J = 1.7 Hz, 1H), 7.82 (d, J = 8.3 Hz,
	2H), 8.05 (d, J = 8.7 Hz, 1H)
	IR(KBr) 1466, 1445, 1365, 1174, 1116, 1079, 964, 812, 686, 584 cm <sup>-1</sup>
	mp 203-205 C
	111 NMR (CDCL) & 1.76 (8, 3H), 1.81 (8, 3H), 2.39 (8, 3H), 2.69 (8, 3H), 2.97 (t, J = 8.6 Hz, 2H), 3.23 (8, 3H), 3.50 (8, 3H),
	3.77 (s, 3H), 3.98 (t, J = 8.6 Hz, 2H), 4.63 (d, J = 6.6 Hz, 2H), 5.49 (t, J = 6.6 Hz, 1H), 6.80 (s, 1H), 7.08 (d, J = 8.5 Hz, 1H),
1.1221	7.24-7.28 (m, 2H), $7.33$ (dd, $J = 8.5$ , $2.0$ Hz, 1H), $7.37-7.39$ (m, 2H), $7.41-7.45$ (m, 1H), $7.71$ (d, $J = 8.4$ Hz, 1H), $7.73$ (d, $J = 1.24$
	8.1 [12, 21])
	IR (KBr) 1474, 1362, 1241, 1166, 1079, 975, 808 cm <sup>-1</sup>
	-
	111 NMR (CDCE) 6 1.76 (8, 3H), 1.82 (8, 3H), 2.39 (8, 3H), 2.98 (t, J = 8.4 Hz, 2H), 3.43 (8, 3H), 3.73 (8, 3H), 3.98 (t, J = 8.4
I-1222	Hz, 2H), 4.61 (d, J = 6.6 Hz, 2H), 5.53 (t, J = 6.6 Hz, 1H), 5.68 (s, 1H), 5.86 (s, 1H), 6.40 (s, 1H), 6.93-6.95 (m, 2H), 7.03-7.05
	(m, 1H), 7.23.7.27 (m, 2H), 7.35.7.37 (m, 1H), 7.46.7.50 (m, 1H), 7.71 (d, J = 8.4 Hz, 1H), 7.74 (d, J = 8.4 Hz, 2H)
•	IR (KBr) 3457, 1480, 1354, 1244, 1164, 1099, 978, 817 cm <sup>-1</sup>
	mp 199.201 ℃
	1H NMR (CDCl <sub>3</sub> ) δ 3.19 (s, 3H), 3.72 (s, 3H), 3.90 (s, 3H), 4.20-4.27 (m, 4H), 5.20 (s, 2H), 6.53 (s, 1H), 6.90-6.99 (m, 3H).
I-1223	I-1223 7.25-7.65 (m, 9H)
	IR (KBr) 3434, 2938, 1604, 1586, 1522, 1484, 1465, 1432, 1368, 1339, 1326, 1249, 1226, 1203, 1174, 1146, 1136, 1106, 1027
`	cm <sup>-1</sup>

Table 242

1.1224	IND 127-129 °C III (CDCh <sub>3</sub> ) & 1.57 (s, 311), 1.65 (s, 311), 1.76 (s, 311), 1.82 (s, 311), 3.46 (s, 3H), 3.64 (m, 2H), 3.76 (s, 3H), 4.30 (t, J = 5.7 Hz, 1H), 4.62 (d, J = 6.9 Hz, 2H), 5.10 (m, 1H), 5.53 (m, 1H), 5.72 (s, 1H), 5.85 (s, 1H), 6.47 (s, 1H), 6.93 (dd, J = 1.8, 8.4 Hz, 1H), 7.05 (d, J = 1.8 Hz, 1H), 7.88 (Abq, J = 8.7 Hz, 4H) IIz, 1H), 6.98 (d, J = 8.4 Hz, 1H), 7.05 (d, J = 1.8 Hz, 1H), 7.88 (Abq, J = 8.7 Hz, 4H) IIR, 1H, 6.937, 1585, 1566, 1518, 1501, 1484, 1460, 1417, 1387, 1363, 1328, 1279, 1243, 1228, 1191, 1155,
I-1225	1129, 1113, 1090, 1068, 1013 cm <sup>-1</sup> mp 162-164 °C l-1225 l-1 NMR (CDCl <sub>3</sub> ) \$\(\delta\) 3.19 (\(\text{s}\) 311), 3.72 (\(\text{s}\) 311), 4.19-4.23 (m, 411), 5.18 (\(\text{s}\) 211, 6.52 (\(\text{s}\) 111), 7.03-7.64 (m, 12H) l-1225 l-1 (KBr) 3433, 2933, 1523, 1483, 1463, 1435, 1377, 1360, 1269, 1227, 1172, 1149, 1126, 1096 cm <sup>-1</sup>
1.1226	mp 188-190 °C  11 NMR (DMSO) & 1.72 (s, 3H), 1.75 (s, 3H), 3.33 (s, 3H), 3.67 (s, 3H), 4.55 (d, J = 6.9 Hz, 2H), 5.49 (m, 1H), 6.50 (s, 1H),  6.66 (dd, J = 2.1, 8.1 Hz, 1H), 6.74 (d, J = 2.1 Hz, 1H), 6.91 (d, J = 8.1 Hz, 1H), 7.42 (bs, 2H), 7.85 (ABq, J = 8.4 Hz, 4H), 8.75  (hs, 2H)  (hs, 2H)  (RBr) 3465, 2937, 1588, 1617, 1600, 1483, 1470, 1446, 1415, 1385, 1340, 1308, 1283, 1246, 1224, 1201, 1186, 1168, 1130, 1116, 1091, 1067, 1011 cm <sup>-1</sup>
1.1227	mp 172-174 °C

Table 243

	mn 160, 175 °C
1-1228	1-1228 3.78 (s, 311), 3.91 (s, 3H), 5.22 (s, 2H), 6.85 (s, 1H), 6.91 (dd, J = 1.8, 8.1 Hz, 1H), 6.976 (d, J = 1.8 Hz, 1H), 6.979 (d, J = 8.1 Hz, 1H)
	Hz, 1HJ, 7.26-7.73 (m, 9H)
	IR (KBr) 3447, 2934, 1604, 1518, 1480, 1390, 1362, 1240, 1227, 1175, 1140, 1081 cm <sup>-1</sup>
	mp 172-174 C
	HI NMR (CDCB) 6 1.74 (8, 3H), 1.78 (8, 3H), 3.71 (8, 3H), 3.87 (8, 3H), 4.20.4.25 (m, 4H), 4.62 (d, J = 6.3 Hz, 2H), 4.94 (bs,
1.1229	1H), 5.57 (m, 1H), 6.55 (s, 1H), 6.89-7.50 (m, 7H)
	IR (KBr) 3410, 2933, 1611, 1522, 1484, 1462, 1422, 1371, 1264, 1238, 1224, 1173, 1134, 1103 cm <sup>-1</sup>
	mp 149-151 °C
	1H NMR (CDC13) 6 1.75 (s, 3H), 1.81 (s, 3H), 3.45 (s, 3H), 3.75 (s, 3H), 3.87 (s, 3H), 4.61 (d, J = 6.6 Hz, 2H), 5.54.5.58 (m,
1-1230	1-1230   1H), 5.69 (s, 1H), 5.91 (s, 1H), 6.46 (s, 1H), 6.93-7.06 (m, 5H), 7.58 (d, $J = 8.7 \text{ Hz}$ , 2H)
	IR (KBr) 3501, 2939, 1680, 1609, 1582, 1520, 1487, 1458, 1397, 1284, 1246, 1191, 1179, 1115, 1067, 1015, 940, 822, 794
	cm.1
	mp 151-152 ℃
	H NMR (CDCl3) 6 1.77 (d, J = 0.6 Hz, 3H), 1.81 (d, J = 0.6 Hz, 3H), 2.04 (s, 3H), 2.08 (s, 3H), 3.20 (s, 3H), 3.77 (br s, 2H),
I-1231	1.1231 3.86 (s, 3H), 4.65 (d, J = 6.6 Hz, 2H), 5.58 (m, 1H), 6.04 (s, 1H), 6.81 (dd, J = 2.1, 8.7 Hz, 1H), 6.81 (d, J = 2.1 Hz, 1H), 7.01
	(d, J = 8.7 Hz, 1H), 7.30-7.36 (m, 2H), 7.38-7.43 (m, 2H)
	118 ARD 3 2484 3393 3034 1608 1611 1482 1371 1239 1213 1197 1173 1163 1138 989 973 871 844 791 cm <sup>-1</sup>

Table 244

2	mp 198-199 °C 4H NMR (DMSO-d <sub>6</sub> ) δ 1.72 (8, 3H), 1.77 (8, 3H), 1.91 (8, 3H), 1.95 (8, 3H), 3.76 (8, 3H), 4.04 (8, 2H), 4.55 (d, J = 6.9 Hz, 2H), 5.48 (m, 1H), 6.40 (8, 1H), 6.69 (dd, J = 1.8, 8.1 Hz, 1H), 6.75 (d, J = 1.8 Hz, 1H), 6.77-6.83 (m, 2H), 7.05-7.11 (m, 3H),
7071-1	9.39 (s. 111) IR (KBr) 3375, 3287, 2913, 1609, 1587, 1578, 1518, 1484, 1434, 1403, 1270, 1235, 1207, 1171, 1136, 1032, 1009, 863, 853, 813, 816, 749 cm.
1.1233	mp 198-199 °C.  1H NMR (CDCh.) 6 1.77 (s, 3H), 1.80 (s, 3H), 1.91 (s, 3H), 2.11 (s, 3H), 2.13 (s, 3H), 3.20 (s, 3H), 3.84 (s, 3H), 4.64 (d, J = 1.1233) 6.6 Hz, 2H), 5.58 (m, 1H), 6.46 (s, 1H), 6.69-6.74 (m, 2H), 6.96 (d, J = 8.4 Hz, 1H), 7.11 (s, 1H), 7.32-7.38 (m, 2H), 7.40-7.46
	(m, 211) IR (KBr) 1651, 1513, 1470, 1448, 1414, 1368, 1330, 1267, 1241, 1214, 1199, 1175, 970, 869 cm <sup>-1</sup>
1-1232	mp 193-194 °C III NMR (CDCl <sub>3</sub> ) & 1.77 (a, 3H), 1.80 (d, J = 0.6 Hz, 3H), 1.94 (a, 3H), 2.11 (a, 3H), 2.13 (a, 3H), 3.84 (a, 3H), 4.64 (d, J = 6.6 IIz, 2H), 5.58 (m, 1H), 6.58 (a, 1H), 6.70-6.75 (m, 2H), 6.85-6.93 (m, 2H), 6.96 (d, J = 8.4 Hz, 1H), 7.13 (a, 1H), 7.19-7.24 (m,
	2H) IR (KBr) 3271, 1654, 1611, 1517, 1467, 1448, 1370, 1289, 1262, 1240, 1213, 1177, 1136, 835 cm <sup>-1</sup>
I-1235	mp 114-115 °C.  1H NMR (CDCl <sub>3</sub> )
	IR (KBr) 3410, 1697, 1621, 1470, 1449, 1410, 1552, 1507, 150

Table 245

55

50	45	40	35	30	25	20	15	10	5
1236	powder III NMR (CDCl <sub>3</sub> ) & 3.22 (s, 3H), 3.38 (s, 3H), 3.46 (s, 3H), 3.92 (s, 3H), 5.22 (s, 2H), 5.76 (s, 1H), 6.97-7.09 (m, 3H), 7.32-	3.22 (s, 3H), 3.	.38 (8, 311), 3	3.46 (s, 3H), 3.9	)2 (s, 3H), 5.2	2 (s, 2H), 5.76	(s, 1H), 6.97-	7.09 (m, 3H), 7	.32-
	7.51 (m, 9H) IR (KBr) 3448, 2935, 1516, 1455, 1394, 1366, 1352, 1246, 1148, 1076, 1016, 972, 881, 699, 541, 524 cm <sup>-1</sup>	, 1516, <u>1455, 13</u>	94, 1366, 13	52, 1246, 1148,	, 1076, 1016,	972, 881, 699,	541, 524 cm <sup>.1</sup>		
	mp 169-172 C III NMR (CDCIA) & 2.49 (s. 3H) 3.21 (s. 3H) 3.47 (s. 3H) 3.50 (s. 3H) 3.92 (s. 3H) 5.23 (s. 2H) 6.95-7.04 (m. 3H) 7.31-	2.49 (s. 3H). 3	21 (8, 3H), 3	3.47 (8, 3H), 3.5	i0 (8, 3H), 3.9	2 (8, 3H), 5.23	(s. 2H). 6.95-	7.04 (m. 3H). 7	.31.
1237	7.49 (m, 9H)	c (10 (s) 01.7	, ((110 (e) 17:	, (a) (a) (b)	7.5 (SEO (S) OF	(1)	(a)	. (/10 (11) 10:	
	IR (KBr) 3009, 2932, 1518, 1459, 1370, 1362, 1250, 1176, 1151, 872, 809, 542, 527 cm <sup>-1</sup>	1518, 1459, 13	70, 1362, 12	50, 1176, 1151,	, 872, 809, 54	2, 527 cm <sup>-1</sup>			
	mp 182-184 C	0 410	0 (110 -) 10	7 0 110 7 07	00 (110 -) 0	1110 - 7 C	7 200	7 (He) 30 L	90
1238	'H NMIK (CDCE) 0 2.67 (8, 311), 3.21 (8, 311), 3.48 (8, 311), 3.50 (8, 311), 3.93 (8, 311), 0.77 (8, 111), 0.30-7.00 (m, 311), 7.51 (m, 411)	2.67 (8, 311), 3.	.ZI (8, 3H), 3	3.48 (8, 3H), 3.5	о (в, зп.), з.9	3 (8, 3H), 5.77	(8, 1n), o.96-	7.00 (m, 3n), 7	ģ. ——
	IR (KBr) 3548, 3502, 2938, 1602, 1519, 1389, 1364, 1176, 1159, 1012, 963, 875, 521 cm <sup>-1</sup>	2938, 1602, 15	19, 1389, 13	64, 1176, 1159,	1012, 963, 8	75, 521 cm <sup>-1</sup>			
	mp 132-135 C								
02.6	11 NMR (CDCh) & 1.77 (e, 3H), 1.80 (e, 3H), 2.62 (e, 3H), 3.21 (e, 3H), 3.48 (e, 3H), 3.51 (e, 3H), 3.90 (e, 3H), 4.64 (d, J =	1.77 (8, 3H), 1.	.80 (s, 3H), 2	62 (s, 3H), 3.2	1 (s, 3H), 3.4	8 (s, 3H), 3.51 (	(в, 3Н), 3.90 (	в, 3H), 4.64 (d,	<u>.</u>
602	6.6 Hz, 2H), 5.51-5.58 (m, 1H), 6.97-7.04 (m, 3H), 7.37-7.51 (m, 4H)	8 (m, 1H), 6.97-	.7.04 (m, 3H)	), 7.37-7.51 (m,	4H)				
	IR (KBr) 2936, 1518, 1464, 1375, 1362, 1246, 1175, 1153, 1013, 968, 872, 805, 529 cm-1	1464, 1375, 13	62, 1246, 11	75, 1153, 1013,	, 968, 872, 80	5, 529 cm <sup>-1</sup>			
	mp 169-172 ℃								
070	<sup>1</sup> H NMR (CDCl <sub>3</sub> ) δ 1.76 (s, 3H), 1.80 (s, 3H), 3.38 (s, 3H), 3.47 (s, 3H), 3.89 (s, 3H), 4.65 (d, J = 6.6 Hz, 2H), 5.06 (s, 1H),	1.76 (s, 3H), 1.	.80 (s, 3H), 3	1.38 (s, 3H), 3.4	7 (s, 3H), 3.8	9 (s, 3H), 4.65	(d, J = 6.6  Hz)	, 2H), 5.06 (s,	Ĥ.
240	5.54-5.61 (m, 1H), 5.83 (s, 1H), 6.92-7.00 (m, 3H), 7.05-7.09 (m, 2H), 7.28-7.33 (m, 2H)	83 (s, 1H), 6.92-	7.00 (m, 3H)	), 7.05-7.09 (m,	2H), 7.28-7.3	13 (m, 2H)			
	IR (KBr) 3458, 2935, 1611, 1520, 1458, 1392, 1244, 1222, 1015, 828, 803 cm <sup>-1</sup>	1611, 1520, 14	58, 1392, 12	44, 1222, 1015,	828, 803 cm	-			

Table 246

1.1241	mp 170-173 °C. III NMR (СЛСЫ) б 1.73 (в, 3H), 1.79 (s, 3H), 2.55-3.00 (m, 3H), 3.21 (s, 3H), 3.22-3.80 (m, 6H), 4.55-4.63 (m, 2H), 5.41- 5.47 (m, 1H), 6.83 (s, 1H), 7.03-7.70 (m, 8H) IR (КВг) 2938, 1686, 1516, 1481, 1378, 1235, 1235, 1179, 1152, 1081, 847, 799, <b>G</b> 75, 527 cm <sup>-1</sup>
1.1242	mp 117-118 °C <sup>1</sup> H NMR (СПСы) δ 1.77 (в, 3H)1.81 (d, J =0.6 Hz, 3H), 2.11 (в, 3H), 2.19 (в, 3H), 3.38 (в, 3H), 4.64 (d, J =6.9 Hz, 2H), 4.75 (br в, 1H), 5.54-5.90 (m, 1H), 6.86-6.91 (m, 2H), 6.93 (в, 1H), 7.10-7.69 (m, 3H), 7.20-7.26 (m, 2H) <sup>1</sup> H (СПСы) 3596, 3010, 2934, 1675, 1519, 1473, 1262, 1172, 1098 cm <sup>-1</sup>
1.1243	foam 1H NMR (CDCl <sub>3</sub> ) & 3.43 (s, 3H), 3.72 (s, 3H), 5.03 (s, 2H), 6.43 (s, 1H), 6.93 (dd, J = 8.4, 2.1 Hz, 1H), 6.94 (d, J = 8.7 Hz, 2H), 7.09 (d, J = 2.1 Hz, 1H), 7.11 (d, J = 8.4 Hz, 1H), 7.29 (ddd, J = 7.8, 4.8, 1.5 Hz, 1H), 7.49 (brd, J = 7.8 Hz, 1H), 7.53 (d, J = 8.7 Hz, 2H), 7.70 (ddd, J = 7.8, 7.8, 1.5 Hz, 1H), 8.61 (brd, J = 4.8 Hz, 1H)  1R (KBr) 3432, 1611, 1588, 1562, 1523, 1488, 1467, 1226, 1114, 1071, 1015, 939, 824, 778, 758 cm. <sup>1</sup>
1.1244	form 111 NMR (CDCl <sub>3</sub> ) & 3.45 (s, 3H), 3.75 (s, 3H), 5.01 (s, 2H), 6.45 (s, 1H), 6.92 (d, J = 8.7 Hz, 2H), 6.99 (dd, J = 8.4, 2.1 Hz, 1H), 7.10 (d, J = 2.1 Hz, 1H), 7.14 (d, J = 8.4 Hz, 1H), 7.30 ~ 7.36 (m, 3H), 7.46 ~ 7.49 (m, 2H), 7.54 (d, J = 8.7 Hz, 2H) 111, 7.10 (d, J = 2.1 Hz, 1H), 7.14 (d, J = 8.4 Hz, 1H), 7.30 ~ 7.36 (m, 3H), 7.46 ~ 7.49 (m, 2H), 7.54 (d, J = 8.7 Hz, 2H) 111, 7.10 (d, J = 2.1 Hz, 1H), 7.14 (d, J = 8.4 Hz, 1H), 7.30 ~ 7.36 (m, 3H), 7.46 ~ 7.49 (m, 2H), 7.54 (d, J = 8.7 Hz, 2H) 111, 7.10 (d, J = 2.1 Hz, 1H), 7.14 (d, J = 8.4 Hz, 1H), 7.30 ~ 7.36 (m, 3H), 7.46 ~ 7.49 (m, 2H), 7.54 (d, J = 8.7 Hz, 2H) 111, 7.10 (d, J = 2.1 Hz, 1H), 7.14 (d, J = 8.4 Hz, 1H), 7.30 ~ 7.36 (m, 3H), 7.46 ~ 7.49 (m, 2H), 7.54 (d, J = 8.7 Hz, 2H) 111, 7.10 (d, J = 2.1 Hz, 1H), 7.14 (d, J = 8.4 Hz, 1H), 7.30 ~ 7.36 (m, 3H), 7.46 ~ 7.49 (m, 2H), 7.54 (d, J = 8.7 Hz, 2H) 111, 7.10 (d, J = 2.1 Hz, 1H), 7.14 (d, J = 8.4 Hz, 1H), 7.30 ~ 7.36 (m, 3H), 7.46 ~ 7.49 (m, 2H), 7.54 (d, J = 8.7 Hz, 2H) 111, 7.10 (d, J = 2.1 Hz, 1H), 7.14 (d, J = 8.4 Hz, 1H), 7.30 ~ 7.36 (m, 3H), 7.46 ~ 7.49 (m, 2H), 7.54 (d, J = 8.7 Hz, 2H) 1113, 1070, 1013, 938, 813, 758 cm. 1113, 1070, 1013, 938, 813, 758 cm.
1.1245	foam  11 NMR (CDCl <sub>3</sub> ) & 3.45 (e, 3H), 3.75 (e, 3H), 5.01 (e, 2H), 6.45 (e, 1H), 6.92 (d, J = 8.7 Hz, 2H), 6.99 (dd, J = 5.1, 3.6 Hz, 1H) MR, 6.99 (dd, J = 8.4, 2.1 Hz, 1H), 7.10 (d, J = 2.1 Hz, 1H), 7.11 (d, J = 8.4 Hz, 1H), 7.27 (dd, J = 3.6, 1.0 Hz, 1H), 7.29 (dd, J = 5.1, 1.0 Hz, 1H), 7.54 (d, J = 8.7 Hz, 2H)  = 5.1, 1.0 Hz, 1H), 7.54 (d, J = 8.7 Hz, 2H)  IR (KBr) 3433, 1612, 1589, 1523, 1488, 1403, 1241, 1224, 1192, 1113, 1070, 1011, 826 cm. <sup>1</sup>

Table 247

1.1246	foam 111 NMR (CDCH <sub>3</sub> ) & 3.45 (s, 311), 3.75 (s, 311), 4.93 (s, 2H), 5.70 (d, J = 1.5 Hz, 1H), 5.75 (d, J = 1.5 Hz, 1H), 6.45 (s, 1H), 1-1246 6.92 (d, J = 8.7 Hz, 2H), 6.99 (dd, J = 8.4, 2.1 Hz, 1H), 7.05 (d, J = 8.4 Hz, 1H), 7.10 (d, J = 2.1 Hz, 1H), 7.54 (d, J = 8.7 Hz, 2H) 2H) 2H) 1R (KBr) 3432, 1611, 1590, 1523, 1489, 1403, 1224, 1193, 1113, 1071, 1010, 938, 826 cm <sup>-1</sup>
1-1247	form 11 NMR (CDCL3) & 3.45 (s, 3H), 3.75 (s, 3H), 5.53 (d, J = 10.5 Hz, 1H), 5.69 (d, J = 16.5 Hz, 1H), 6.11 (ddd, J = 16.5, 10.5, 11.1247 (c.3 Hz, 1H), 6.44 (d, J = 6.3 Hz, 1H), 6.46 (s, 1H), 6.88 (d, J = 8.4 Hz, 1H), 6.91 ~ 6.93 (m, 2H), 6.92 (d, J = 8.7 Hz, 2H), 7.53 (d, J = 8.7 Hz, 2H) 1R (KBr) 3433, 1611, 1592, 1522, 1485, 1403, 1226, 1106, 1059, 814 cm <sup>-1</sup>
1-1248	foam  14. 12. 12. 14. 12. 14. 14. 14. 14. 15. 15. 15. 15. 15. 15. 15. 15. 15. 15
I-1249	foam  1H NMR (CDCl <sub>3</sub> ) \(\delta\) 3.38 (a, 3H), 3.67 (a, 3H), 5.12 (a, 2H), 6.43 (a, 1H), 6.56 (d, J = 3.3 Hz, 1H), 6.79 (dd, J = 2.1, 8.1 Hz, 1.1), 6.84 (d, J = 8.7 Hz, 2H), 6.87 (d, J = 2.1 Hz, 1H), 7.02 (d, J = 3.3 Hz, 1H), 7.02 (d, J = 8.1 Hz, 1H), 7.45 (d, J = 8.7 Hz, 2H)  2H)  1R (KBr) 3431, 1698, 1611, 1523, 1489, 1405, 1246, 1114, 1071, 1012, 816, 786 cm. <sup>1</sup>
1.1250	14 NMR (CDCl <sub>3</sub> ) δ 3.38 (s, 3H), 3.67 (s, 3H), 4.66 (tt, J = 2.7, 6.9 Hz, 2H), 4.90 (tt, J = 2.7, 6.9 Hz, 2H), 5.43 (tt, J = 6.9, I-1250 (c) Hz, 1H), 6.45 (s, 1H), 6.92 (d, J = 8.7 Hz, 2H), 6.96 (br.s, 2H), 7.07 (s, 1H), 7.53 (d, J = 8.7 Hz, 2H) (loop, 16.9, 16.9, 16.2, 16.9, 16.2, 1489, 1404, 1248, 1113, 1070, 1008, 938, 845, 825 cm. <sup>1</sup>

Table 248

1.1251	fourn (CDCB) & 1.69 (dd, J = 3.3, 6.9 Hz, 3H), 3.46 (s, 3H), 3.74 (s, 3H), 4.63 (dd, J = 2.4, 6.3 Hz, 2H), 5.28 (m, 1H), 5.33 (m, 1H), 6.45 (s, 1H), 6.92 (d, J = 8.7 Hz, 2H), 6.95 (d, J = 1.5 Hz, 1H), 6.96 (br.s, 1H), 7.06 (d, J = 1.5 Hz, 1H), 7.52 (d, J = 8.7 Hz, 2H)  = 8.7 Hz, 2H)  IR (KBr) 3436, 2933, 1968, 1612, 1587, 1523, 1489, 1464, 1404, 1112, 1071, 1011, 998, 824 cm <sup>-1</sup>
1-1252	fonum 111 NMR (CDCU <sub>3</sub> ) & 1.02 (t, J = 7.2 Hz, 3H), 2.05 (ddq, J = 3.3, 6.3, 7.2 Hz, 2H), 3.46 (g, 3H), 3.74 (g, 3H), 4.64 (dd, J = 2.4, 1.1252   6.0 Hz, 2H), 5.40 (m, 2H), 6.45 (g, 1H), 6.91 (d, J = 8.7 Hz, 2H), 6.94 (d, J = 2.1, 8.4 Hz, 1H), 6.97 (d, J = 8.4 Hz, 1H), 7.06 (d, J = 2.1 Hz, 1H), 7.54 (d, J = 8.7 Hz, 2H)  J = 2.1 Hz, 1H), 7.54 (d, J = 8.7 Hz, 2H)  IR (KBr) 3.479, 2960, 2933, 1964, 1612, 1582, 1522, 1489, 1403, 1242, 1113, 1072, 1011, 999, 944, 872 cm. <sup>1</sup>
1.1253	foanm 14. NMR (CDCl <sub>3</sub> ) & 1.03 (d, J = 6.6 Hz, 6H), 2.34 (m, 1H), 3.46 (s, 3H), 3.74 (s, 3H), 4.63 (dd, J = 2.7, 6.3 Hz, 2H), 5.33 (m, H), 5.44 (m, 1H), 6.45 (s, 1H), 6.92 (d, J = 8.7 Hz, 2H), 6.93 (d, J = 1.8, 7.8 Hz, 1H), 6.97 (d, J = 7.8 Hz, 1H), 7.06 (d, J = 1.8 Hz, 1H), 7.53 (d, J = 8.7 Hz, 2H) 11z, 11l), 7.53 (d, J = 8.7 Hz, 2H) 11R (KBr) 3434, 2958, 1960, 1612, 1689, 1623, 1489, 1226, 1113, 1071, 1011, 939, 825 cm <sup>-1</sup>
1.124	foam <sup>1</sup> H NMR (CDCl <sub>3</sub> ) & 2.62 (d, J = 2.4 Hz, 1H), 3.45 (s, 3H), 3.75 (s, 3H), 4.18 (dd, J = 7.2, 11.4 Hz, 1H), 4.38 (dd, J = 2.4, 11.4 Hz, 1H), 4.94 (ddd, J = 2.4, 2.4, 7.2 Hz, 1H), 6.44 (s, 1H), 6.92 (d, J = 8.7 Hz, 2H), 6.98 (d, J = 8.4 Hz, 1H), 7.01 (d, J = 1.8, 8.4 Hz, 1H), 7.08 (d, J = 1.8 Hz, 1H), 7.52 (d, J = 8.7 Hz, 2H)  8.4 Hz, 1H), 7.08 (d, J = 1.8 Hz, 1H), 7.52 (d, J = 8.7 Hz, 2H)  IR (KBr) 3434, 3283, 2127, 1612, 1686, 16323, 1487, 1226, 1115, 1069, 1007, 943, 825 cm <sup>-1</sup>

Table 251

1.1266	mp85-86 °C 111 NMR (CHCh, 3 2.85 (s, 311), 3.32 (s, 311), 3.82 (s, 311), 5.38 (s, 211), 7.04 (s, 111), 7.22 (s, 111), 7.25 (d, J = 8.4 Hz, 114), 7.48-7.67 (m, 7H), 8.45 (brs, 1H) 118(KBr) 3432, 2938, 1740, 1608, 1517, 1483, 1396, 1366, 1271, 1179, 1111, 1080, 832, 810, 698 cm <sup>-1</sup> 118(KBr) 3432, 2938, 1740, 1608, 1517, 1483, 1396, 1366, 1271, 1179, 1111, 1080, 832, 810, 698 cm <sup>-1</sup> 119 NMR (CHCh, 3 311), 3.50 (s, 311), 4.95 (brs, 11), 5.22 (s, 211), 5.88 (brs, 11), 6.81 (s, 11), 6.94 (d, J = 8.1 Hz, 211), 7.02-7.14 (m, 311), 7.37-7.56 (m, 711) 118(KBr) 3409, 2933, 1612, 1522, 1488, 1454, 1400, 1266, 1229, 1199, 1162, 1007, 834, 696 cm <sup>-1</sup>	υς (CDCl <sub>3</sub> ) δ 2.85 (8, 311), 3.32 (8 (CDCl <sub>3</sub> ) δ 2.85 (8, 311), 3.32 (8 (CDCl <sub>3</sub> ) δ 2.14 (8, 311), 3.50 (8	\$\(\text{CDC}\)\(\text{CDC}\)\(\text{A}\)\(\text{A}\) 2.85 (8, 3H), 3.32 (8, 3H), 3.96 (8, 3H), 5.38 (8, 2H), 7.04 (8, 1H), 7.35 (d, J = 8.4 Hz, 1H), 7.48-7.67 (m, 7H), 8.45 (brs, 1H)  3432, 2938, 1740, 1608, 1517, 1483, 1396, 1366, 1271, 1179, 1111, 1080, 832, 810, 698 cm <sup>-1</sup> \$\(\text{CDC}\)\(\text{CDC}\)\(\text{A}\)\(A	. 3.82 (н. 3П), (ш, 7Н), 8.41 396, 1366, 12 4.4.95 (brя, 11	3.96 (s, 3H), 5 (brs, 1H) 771, 1179, 111 H), 5.22 (s, 21	5.38 (s, 2H), 7 1, 1080, 832, 8 1), 5.88 (brs, 1) 2, 1007, 834, 6	.04 (8, 1H), 7. 110, 698 cm <sup>-1</sup> H), 6.81 (8, 1]	2.85 (8, 311), 3.32 (8, 311), 3.82 (8, 311), 3.96 (8, 311), 5.38 (8, 211), 7.04 (8, 111), 7.22 (8, 114), 7.26 (d, J = J = 8.4 Hz, 114), 7.48-7.67 (m, 714), 8.45 (brs, 114) 1740, 1608, 1517, 1483, 1396, 1366, 1271, 1179, 1111, 1080, 832, 810, 698 cm <sup>-1</sup> 2.14 (8, 311), 3.50 (8, 311), 4.95 (brs, 114), 5.22 (8, 211), 5.88 (brs, 114), 6.81 (8, 114), 6.94 (d, J = 8.1 Hz, 11), 7.37-7.56 (m, 711) 1612, 1522, 1488, 1454, 1400, 1266, 1229, 1199, 1162, 1007, 834, 696 cm <sup>-1</sup>	(d, J = 8.1 Hz,
1.1267	mp87-88 °C <sup>1</sup> H NMR (CDCl <sub>3</sub> ) δ 2.13 (s, 3H), 2.59 (s, 3H), 3.20 (s, 3H), 3.55 (s, 3H), 5.22 (s, 2H), 6.99-7.17 (m, 5H), 7.34-7.48 (m, 6H), 7.67 (d, J = 8.4 Hz, 2H) <sup>1</sup> G7 (d, J = 8.4 Hz, 2H) <sup>1</sup> R(KBr) 3428, 2931, 1612, 1522, 1488, 1454, 1400, 1266, 1230, 1163, 1007, 835 cm <sup>-1</sup>	δ 2.13 (s, 3  z, 2H) 31, 1612, 1522	C(DCla) & 2.13 (s, 3H), 2.59 (s, 3H), 3.20 (s, 3H), 3.55 (s, 3H), 5.22 (s, 2H) = 8.4 Hz, 2H) 3428, 2931, 1612, 1522, 1488, 1454, 1400, 1266, 1230, 1163, 1007, 835 cm <sup>-1</sup>	, 3.20 (s, 3H), 400, 1266, 12	3.55 (s, 3H), 30, 1163, 100	5.22 (s, 2H), 6 7, 835 cm <sup>-1</sup>	.99-7.17 (m, t	3H), 7.34-7.48 (	n, 6H),
1.1268	mp76-77 °C H1 NMR (CDCl <sub>3</sub> ) δ 1.72 (s, 3H), 1.77 (s, 6H), 1.81 (s, 3H), 2.69 (s, 3H), 3.24 (s, 3H), 3.61 (s, 3H), 3.79 (s, 3H), 4.12-4.20 (m, 1H), 4.55-4.61 (m, 1H), 4.64 (d, J = 6.6 Hz, 2H), 5.25 (t, J = 7.5 Hz, 1H), 5.50 (t, J = 6.4 Hz, 1H), 6.85 (s, 1H), 7.05-7.11 (m, 2H), 7.34-7.40 (m, 3H) IR(KBr) 3423, 2939, 1707, 1521, 1484, 1367, 1241, 1178, 1079, 1034, 972, 799, 521 cm <sup>-1</sup>	6 1.72 (s, 31 , 1H), 4.64 (d, , 3H) 39, 1707, 1521	H), 1.77 (s, 6H), J = 6.6 Hz, 2H	1.81 (e, 3H), ; ), 5.25 (t, J = 241, 1178, 10	2.69 (s, 3H), 3 7.5 Hz, 1H), 4	.24 (s, 3H), 3.6 5.50 (t, J = 6.4 , 799, 521 cm <sup>-1</sup>	11 (s, 3H), 3.7 Hz, 1H), 6.8	°C (CDCt <sub>11</sub> )	.20 (m,
1-1269	mp73·74 ℃ III NMR (CDCh) δ 2.17 (8, 311), 2.28 (8, 311), 5.16 (8, 211), 5.71 (brs, 111), 6.83 (d, (s, 1H), 7.15 (8, 1H), 7.32·7.33 (m, 2H), 7.36·7.45 (m, 5H), 7.60 (d, J = 10.5 Hz, 1H), IR(KBr) 3410, 2923, 1718, 1606, 1540, 1521, 1489, 1424, 1282, 1179, 976, 728 cm <sup>-1</sup>	δ 2.17 (8, 31 1), 7.32-7.33 ( 23, 1718, 1606	°C (CDCh) & 2.17 (s, 311), 2.28 (s, 311), 5.16 (s, 211), 5.71 (brs, 111), 6.83 (d, J = 8.1 Hz, 111 15 (s, 1H), 7.32-7.33 (m, 2H), 7.36-7.45 (m, 5H), 7.60 (d, J = 10.5 Hz, 1H), 8.05 (brs, 1H) 1010, 2923, 1718, 1606, 1540, 1521, 1489, 1424, 1282, 1179, 976, 728 cm <sup>-1</sup>	, 6.16 (s, 211), 45 (m, 5H), 7. 489, 1424, 12	5.71 (brs, 1ll 60 (d, J = 10.6 82, 1179, 976	), 6.83 (d, J = 8 5 Hz, 1H), 8.05	8.1 Hz, 1II), C (brs, 1H)	°C (CDCh) & 2.17 (e, 311), 2.28 (e, 311), 5.16 (e, 211), 5.71 (brs. 111), 6.83 (d, J = 8.1 Hz, 111), 6.97-7.00 (m, 211), 7.08 (e, 114), 7.32-7.33 (m, 211), 7.36-7.45 (m, 511), 7.60 (d, J = 10.5 Hz, 111), 8.05 (brs. 111) (brs. 111) (brs. 111) (brs. 111)	), 7.08

Table 252

· 35

1.1270	mp65-67 °C
1-1271	HIGHER STREET, 5230, 1912, 1113, 1123, 1131, 1131 (8, 3H), 3.52 (8, 3H), 3.72 (8, 3H), 4.61 (d, J = 7.2 Hz, 2H), 5.36 (t, J = 6.6 argorname) (CDCh) & 1.76 (8, 6H), 1.79 (8, 3H), 1.81 (8, 3H), 3.52 (8, 3H), 3.72 (8, 3H), 4.61 (d, J = 7.2 Hz, 2H), 5.36 (t, J = 6.6 argorname) (CDCh) & 1.76 (8, 6H), 1.70 (8, 1H), 6.81 (brs, 1H), 6.43 (8, 1H), 6.46-6.52 (m, 1H), 6.95 (8, 2H), 7.05 (8, 1H), 7.10-7.16 (m, 1H)  11.1271 (m, 1H)  12.10-7.16 (m, 1H)  13.10-7.16 (m, 1H)
1-1272	mp75.76 °C  1H NMR (CDCl <sub>3</sub> ) δ 2.17 (8, 3H), 2.28 (8, 3H), 3.12 (8, 3H), 5.18 (8, 2H), 7.09.7.14 (m, 4H), 7.26.7.47 (m, 8H),7.61 (d, J = 11.4 Hz, 1H), 8.00 (brs, 1H)  11.4 Hz, 1H), 8.00 (brs, 1H)  11.6 Hz, 1H), 8.00 (brs, 1H)
1.1273	
1.1274	oil  1H NMR (CDCl <sub>3</sub> ) & 1.73 (8, 3H), 1.76 (8, 3H), 1.77 (8, 3H), 1.79 (8, 3H), 2.22 (8, 3H), 2.27 (8, 3H), 3.73 (d, J = 6.0 Hz, 2H), 3.88 (8, 3H), 4.63 (d, J = 6.6 Hz, 2H), 5.36 (t, J = 6.0 Hz, 1H), 5.57 (t, J = 6.6 Hz, 1H), 6.40-6.51 (m, 2H), 6.87-6.95 (m, 3H), 7.05-7.14 (m, 3H)  1R(CHCl <sub>3</sub> ) 3021, 2934, 1628, 1523, 1492, 1235, 1219, 1139 cm <sup>-1</sup>

Table 253

50	1.1275 4.	oil 14 1.1276 6.3	I. 1277   II.	I.1278 6.8	m;  -1279   Hz   Hz
45	mp64-65 °C. III NMR (CDCla) & 1.74 (s, 311), 1.77 (s, 614), 1.82 (s, 314), 2.16 (s, 314), 2.29 (s, 314), 3.23 (s, 314), 4.36 (d, J = 7.5 Hz, 214), 4.64 (d, J = 6.3 Hz, 214), 5.28 (t, J = 8.4 Hz, 114), 5.51 (t, J = 6.3 Hz, 114), 7.01-7.16 (m, 614), 7.24-7.35 (m, 214) IR(KBr) 3422, 2926, 1698, 1519, 1489, 1367, 1209, 1170, 962, 807 cm <sup>-1</sup>	oil  1H NMR (CDCl <sub>3</sub> )	mp64-65 °C 111 NMR (CDCl.) δ 1.76 (a, 3H), 1.80 (a, 6H), 1.85 (a, 3H), 2.23 (a, 3H), 2.30 (a, 3H), 3.74 (d, J = 6.3 Hz, 2H), 4.64 (d, J = 6.0 Hz, 2H), 5.38 (t, J = 6.6 Hz, 1H), 5.55 (t, J = 6.9 Hz, 1H), 5.73 (bra, 1H), 6.41-6.50 (m, 2H), 6.84-7.15 (m, 6H)  1R(KBr) 3354, 2971, 1627, 1522, 1490, 1274, 1200, 1128, 990, 843 cm. <sup>1</sup>	mp 153-154 °C  HI NMR (CDCl <sub>3</sub> ) δ 1.77 (s, 3H), 1.82 (s, 3H), 1.95 (s, 12H), 4.64 (d, J = 6.9 Hz, 2H), 4.78 (s, 1H), 5.57 (t, J = 6.9 Hz, 1H),  6.85 (ddd, J = 8.3, 2.1, 1.2 Hz, 1H), 6.90 (d, J = 8.6 Hz, 2H), 6.92 (dd, J = 12.0, 2.1 Hz, 1H), 7.04 (d, J = 8.6 Hz, 2H), 7.04 (t, J = 8.3 Hz, 1H),  18.3 Hz, 1H),  IR (KBr) 3433, 1514, 1293, 1262, 1242, 1112, 984 cm <sup>-1</sup>	mp 115-117 °C  1H NMR (CDCl <sub>3</sub> ) & 1.76 (a, 3H), 1.81 (a, 3H), 2.23 (a, 3H), 3.21 (a, 3H), 3.81 (a, 3H), 4.63 (d, J = 6.6 Hz, 2H), 5.55 (t, J = 6.6 Hz, 1H), 6.81 (a, 1H), 7.02 (t, J = 8.6 Hz, 1H), 7.20 (a, 1H), 7.24-7.28 (m, 1H), 7.33-7.44 (m, 3H)  1R (KBr) 3434, 1522, 1492, 1337, 1218, 1200, 1148, 979, 876 cm <sup>-1</sup>
40	δ 1.74 (s, 3H 2H), 5.28 (t, 5.38 (s, 15.9)	6 2.21 (s, 3H) , J = 6.3 Hz, 1	5 1.76 (s, 3H), = 6.6 Hz, 1H),	5 1.77 (s, 3H) 1, 1.2 Hz, 1H; 1, 1293, 1262,	1.76 (s, 3H), ), 7.02 (t, J = 8
35	), 1.77 (s, 6H) J = 8.4 Hz, 1H 1489, 1367, 1	, 2.26 (s, 3H), H), 6.36-6.49 5, 1492, 1274	6.55 (t, J = 6.9 1490, 1274, 13	, 1.82 (s, 3H), ), 6.90 (d, J = ) 1242, 1112, 9	1.81 (s. 3H), 5 3.6 Hz, 1H), 7. 1218, 1200, 1
30	, 1.82 (s, 3H), 3 ), 5.51 (t, J = 6 209, 1170, 962	, 3.95 (d, J = 6, (m, 21!), 6.97-7	1.85 (e, 3H), 2. 3 Hz, 1H), 5.73 200, 1128, 990	1.95 (s, 12H), 8.6 Hz, 2H), 6.9 84 cm <sup>-1</sup>	2.23 (s, 3H), 3.5 20 (s, 1H), 7.2 148, 979, 876 c
25	2.16 (s, 3H), 2 3.3 Hz, 1H), 7.0	.6 Hz, 2H), 4.5 7.15 (m, 6H) 83 cm <sup>-1</sup>	23 (s, 3H), 2.3 (brs, 1H), 6.4 ,843 cm. <sup>1</sup>	4.64 (d, J = 6. 92 (dd, J = 12.	21 (s, 3H), 3.8 4-7.28 (m, 1H)
20	29 (s, 3H), 3.2.	8 (brв, 1Н), 4.	J (6, 3H), 3.74 (	9 Hz, 2H), 4.76	(e, 3H), 4.63 (
15	3 (s, 3H), 4.30	78 (d, J = 6.0	d, J = 6.3 Hz, 6.84-7.15 (m	(6, 1H), 5.57	1, J = 6.6 Hz, 3H)
10	3 (d, J = 7.5 l n, 2H)	Hz, 2H), 6.00	2H), 4.64 (d,	(t, J = 6.9 H	2H), 5.55 (t,
5	Iz, 2H),	(t, J =	J = 6.0	z, 1H), 04 (t, J	J = 6.8

Table 254

mp 88-90 111 NMR ( 1-1280 6.7 Hz, 111 2.1 Hz, 113 11R (KBr) 3 mp 158-16 11 NMR ( 1-1281 Hz, 2H), 5 7.18-7.24 ( 11 NMR ( 1-1282 Hz, 2H), 5 11 NMR ( 1-1282 Hz, 2H)	mp 88-90 °C.  11 NMR (CDC13) δ 1.76 (a, 311), 1.80 (a, 311), 2.24 (a, 311), 3.80 (a, 311), 4.63 (d, J = 6.7 Hz, 211), 4.88 (br s, 114), 5.55 (t, J = 6.7 Hz, 111), 6.83 (s, 114), 6.90 (d, J = 8.7 Hz, 24), 7.01 (t, J = 8.6 Hz, 114), 7.18 (s, 114), 7.24-7.28 (m, 314), 7.36 (dd, J = 12.9, 2.1 Hz, 114)  11 (KBr) 3400, 1523, 1493, 1263, 1217, 1128, 977, 836 cm <sup>-1</sup> mp 158-159 °C  11 NMR (CDC13) δ 1.76 (s, 314), 1.80 (d, J = 0.3 Hz, 314), 2.10 (s, 314), 2.34 (s, 314), 2.50 (s, 314), 3.87 (s, 314), 4.63 (d, J = 6.9 Hz, 214), 5.14 (s, 114), 5.55 (m, 114), 6.88 (s, 114), 6.77-6.82 (m, 214), 6.85-6.91 (m, 214), 6.98 (d, J = 8.1 Hz, 114), 7.13 (s, 114), 118.7.24 (m, 214)  11 (KBr) 3465, 1610, 1516, 1473, 1382, 1322, 1307, 1266, 1240, 1213, 1179, 1168, 1147, 1100, 982, 836 cm <sup>-1</sup> 12 (KBr) 365 °C
	ЧМК (СПСВ.) δ 1.76 (8, 311), 1.80 (8, 311), 2.24 (8, 311), 3.80 (8, 311), 4.63 (4, J = 6.7 Hz, 211), 4.88 (br s. 1H), 5.55 (t, J = 12.9, 111), 6.83 (8, 111), 6.83 (8, 111), 6.90 (d, J = 8.7 Hz, 2H), 7.01 (t, J = 8.6 Hz, 1H), 7.18 (s, 1H), 7.24-7.28 (m, 3H), 7.36 (dd, J = 12.9, 112, 111), 1128, 977, 836 cm <sup>-1</sup> [KBr] 3400, 1523, 1493, 1263, 1217, 1128, 977, 836 cm <sup>-1</sup> [KBr] 3400, 1523, 1493, 1263, 1217, 1128, 977, 836 cm <sup>-1</sup> [KBr] 3400, 1523, 1493, 1263, 1217, 1128, 977, 836 cm <sup>-1</sup> [KBr] 3400, 1523, 1493, 1263, 1217, 1128, 977, 836 cm <sup>-1</sup> [KBr] 3400, 1523, 1493, 1263, 1322, 1307, 1266, 1240, 1213, 1179, 1168, 1147, 1100, 982, 836 cm <sup>-1</sup> [KBr] 3465, 1610, 1516, 1473, 1382, 1322, 1307, 1266, 1240, 1213, 1179, 1168, 1147, 1100, 982, 836 cm <sup>-1</sup>
	Hz, 1H), 6.83 (s, 1H), 6.90 (d, J = 8.7 Hz, 2H), 7.01 (t, J = 8.6 Hz, 1H), 7.18 (s, 1H), 7.24-7.28 (m, 3H), 7.36 (dd, J = 12.9, 111, 1111), 1111, 1111, 1112, 1123, 1493, 1263, 1217, 1128, 977, 836 cm <sup>-1</sup> KBr) 3400, 1523, 1493, 1263, 1217, 1128, 977, 836 cm <sup>-1</sup> 168-169 °C  WMR (CDCl <sub>3</sub> ) & 1.76 (s, 3H), 1.80 (d, J = 0.3 Hz, 3H), 2.10 (s, 3H), 2.34 (s, 3H), 2.50 (s, 3H), 3.87 (s, 3H), 4.63 (d, J = 6.9 2H), 5.14 (s, 1H), 5.55 (m, 1H), 5.88 (s, 1H), 6.77-6.82 (m, 2H), 6.86-6.91 (m, 2H), 6.98 (d, J = 8.1 Hz, 1H), 7.13 (s, 1H), 1.7.24 (m, 2H)  KBr) 3465, 1610, 1516, 1473, 1382, 1322, 1307, 1266, 1240, 1213, 1179, 1168, 1147, 1100, 982, 836 cm <sup>-1</sup> 85-86 °C
	IGB <sub>T</sub> ) 3400, 1523, 1493, 1263, 1217, 1128, 977, 836 cm <sup>-1</sup> 168-169 °C  VMR (CDCl <sub>3</sub> ) & 1.76 (s, 3H), 1.80 (d, J = 0.3 Hz, 3H), 2.10 (s, 3H), 2.34 (s, 3H), 2.50 (s, 3H), 3.87 (s, 3H), 4.63 (d, J = 6.9  21), 5.14 (s, 1H), 5.55 (m, 1H), 5.88 (s, 1H), 6.77-6.82 (m, 2H), 6.85-6.91 (m, 2H), 6.98 (d, J = 8.1 Hz, 1H), 7.13 (s, 1H), 1.7.24 (m, 2H)  (KB <sub>T</sub> ) 3465, 1610, 1516, 1473, 1382, 1322, 1307, 1266, 1240, 1213, 1179, 1168, 1147, 1100, 982, 836 cm <sup>-1</sup> 85-86 °C
	IGH-169 °C.  NMR (CDCl <sub>3</sub> ) § 1.76 (s, 3H), 1.80 (d, J = 0.3 Hz, 3H), 2.10 (s, 3H), 2.34 (s, 3H), 2.50 (s, 3H), 3.87 (s, 3H), 4.63 (d, J = 6.9 2H), 5.14 (s, 1H), 5.55 (m, 1H), 5.88 (s, 1H), 6.77-6.82 (m, 2H), 6.85-6.91 (m, 2H), 6.98 (d, J = 8.1 Hz, 1H), 7.13 (s, 1H), 1.7.24 (m, 2H)  KHP <sub>1</sub> 3465, 1610, 1516, 1473, 1382, 1322, 1307, 1266, 1240, 1213, 1179, 1168, 1147, 1100, 982, 836 cm <sup>-1</sup> 85-86 °C.
	VMR (CDCl <sub>3</sub> ) δ 1.76 (8, 3H), 1.80 (d, J = 0.3 Hz, 3H), 2.10 (8, 3H), 2.34 (8, 3H), 2.50 (8, 3H), 3.87 (8, 3H), 4.63 (d, J = 6.9 2H), 5.14 (8, 1H), 5.55 (m, 1H), 5.88 (8, 1H), 6.77-6.82 (m, 2H), 6.85-6.91 (m, 2H), 6.98 (d, J = 8.1 Hz, 1H), 7.13 (8, 1H), 7.24 (m, 2H)  (KBr) 3465, 1610, 1516, 1473, 1382, 1322, 1307, 1266, 1240, 1213, 1179, 1168, 1147, 1100, 982, 836 cm <sup>-1</sup> 85-86 ℃
	2H), 5.14 (s, 1H), 5.55 (m, 1H), 6.88 (s, 1H), 6.77-6.82 (m, 2H), 6.85-6.91 (m, 2H), 6.98 (d, J = 8.1 Hz, 1H), 7.13 (s, 1H), 1.24 (m, 2H)  K(H <sub>2</sub> ) 3465, 1610, 1516, 1473, 1382, 1322, 1307, 1266, 1240, 1213, 1179, 1168, 1147, 1100, 982, 836 cm <sup>-1</sup> 85-86 °C
118 (K mp 8 mp 8 1-1282 = 6.8	1-7.24 (m, 2H)  {khr  3465, 1610, 1516, 1473, 1382, 1322, 1307, 1266, 1240, 1213, 1179, 1168, 1147, 1100, 982, 836 cm <sup>-1</sup> 85-86 °C
	KBr) 3465, 1610, 1516, 1473, 1382, 1322, 1307, 1266, 1240, 1213, 1179, 1168, 1147, 1100, 982, 836 cm <sup>-1</sup> 85-86 ℃
L	85-86 °C
	1H NMR (CDCl <sub>3</sub> ) 6 0.99 (d, J = 6.2 Hz, 6H), 1.71-1.98 (m, 3H), 2.27 (s, 3H), 2.29 (s, 3H), 3.20 (s, 3H), 3.88 (s, 3H), 4.10 (t, J
	= 6.8 Hz, 2H), 6.88 (dd, J = 2.0, 8.6 Hz, 1H), 6.88 (d, J = 2.0 Hz, 1H), 6.95 (d, J = 8.6 Hz, 1H), 7.30-7.46 (m, 4H)
	IR (KBr) 1519, 1488, 1375, 1255, 1243, 1214, 1204, 1173, 1164, 1134, 867, 860, 792 cm <sup>-1</sup>
mp 1	_
	<sup>1</sup> H NMR (CDCl <sub>3</sub> ) $\delta$ 0.99 (d, $J = 6.3$ Hz, 6H), 1.76-1.94 (m, 3H), 2.27 (s, 3H), 2.28 (s, 3H), 3.88 (s, 3H), 4.10 (t, $J = 6.6$ Hz,
I-1283 211),	211), 4.91 (s, 111), 6.86-6.91 (m, 4H), 6.94 (d, J = 8.7 Hz, 1H), 7.12 (s, 1H), 7.15 (s, 1H), 7.22-7.27 (m, 2H)
IR (K	IR (KBr) 3438, 1611, 1522, 1490, 1475, 1464, 1446, 1256, 1242, 1212, 1180, 1171, 1137, 1032, 834, 818 cm <sup>-1</sup>
mp 1	mp 156-157 °C
N H:	1H NMR (CDCl <sub>3</sub> ) & 3.46 (e, 3H), 3.76 (e, 3H), 3.89 (e, 3H), 4.78 (d, J = 6.3 Hz, 2H), 4.99 (e, 1H), 5.96 (e, 1H), 6.25 (t, J = 6.3
I-1284 Hz, 1	$H_{Z_1}$ 1H), 6.47 (s, 1H), 6.90-6.95 (m, 2H), 6.93 (d, $J = 7.8$ $H_{Z_1}$ 1H), 7.04 (dd, $J = 2.1$ , 7.8 $H_{Z_1}$ 1H), 7.04 (d, $J = 2.1$ $H_{Z_2}$ 1H),
7.51.	7.51.7.57 (m, 2H)
IR (K	IR (KBr) 3455, 1612, 1622, 1487, 1456, 1396, 1269, 1234, 1223, 1209, 1173, 1140, 1115, 1024, 885, 825, 813 cm

Table 255

mp 84-85 °C  11-1245  6.92 (m, 211), 6.97-7.14  IR (KBr) 3389, 1523, 1.1  mp 152-153 °C  111 NMR (CDCl <sub>3</sub> ) °5 1.1  IR (CHCl <sub>3</sub> ) 3596, 3440, mp 123-125 °C  1-1287  1H NMR (CDCl <sub>3</sub> ) °5 0.2  1-1287  1H NMR (CDCl <sub>3</sub> ) °6 0.3  1-1288  (s, 3H), 3.76 (s, 3H), 3.8  1072, 1011 cm <sup>-1</sup> mp 153-156 °C  11-1288  1072, 1011 cm <sup>-1</sup> mp 163-156 °C  11-1289	mp 84-85 $^{\circ}$ C <sup>11</sup> (CDC) <sup>13</sup> $^{\circ}$ 1.00 (d, J = 6.6 Hz, 6H), 1.71-1.96 (m, 3H), 2.27 (s, 6H), 4.11 (t, J = 6.9 Hz, 2H), 4.80 (hr s, 1H), 6.86-6.92 (m, 2H), 6.97-7.14 (m, 5H), 7.22-7.27 (m, 2H)  IR (KBr) 3389, 1523, 1491, 1476, 1427, 1301, 1276, 1233, 1196, 1168, 1126, 836, 815 cm <sup>-1</sup> mp 152-153 $^{\circ}$ C  II NMR (CDC) <sup>13</sup> $^{\circ}$ 1.76 (s, 3H), 1.80 (d, J = 0.6 Hz, 3H), 2.12 (s, 3H), 2.20 (s, 3H), 3.39 (s, 3H), 3.87 (s, 3H), 4.64 (d, J = 6.3 Hz, 2H), 4.79 (hr s, 1H), 5.66-5.61 (m, 1H), 6.82-6.97 (m, 6H), 7.21-7.26 (m, 2H)  mp 123-125 $^{\circ}$ C  mp 123-125 $^{\circ}$ C
	δ 1.00 (d, J = 6.6 Hz, 6H), 1.71-1.96 (m, 3H), 2.27 (s, 6H), 4.11 (t, J = 6.9 Hz, 2H), 4.80 (hr s, 1H), 6.86-7.7.14 (m, 5H), 7.22-7.27 (m, 2H)  223, 1491, 1476, 1427, 1301, 1276, 1233, 1196, 1168, 1126, 836, 815 cm <sup>-1</sup> δ 1.76 (s, 3H), 1.80 (d, J = 0.6 Hz, 3H), 2.12 (s, 3H), 2.20 (s, 3H), 3.39 (s, 3H), 3.87 (s, 3H), 4.64 (d, J = 6.3 s, 1H), 5.66-5.61 (m, 1H), 6.82-6.97 (m, 6H), 7.21-7.26 (m, 2H)  3440, 3011, 2935, 1676, 1612, 1688, 1518, 1473, 1449, 1259, 1238, 1173 cm <sup>-1</sup>
	7-7.14 (m, 511), 7.22-7.27 (m, 2H) 523, 1491, 1476, 1427, 1301, 1276, 1233, 1196, 1168, 1126, 836, 815 cm <sup>-1</sup> \$\tilde{\alpha}\$ 1.76 (s, 3H), 1.80 (d, J = 0.6 Hz, 3H), 2.12 (s, 3H), 2.20 (s, 3H), 3.39 (s, 3H), 3.87 (s, 3H), 4.64 (d, J = 6.3 s, 11H), 5.66-5.61 (m, 1H), 6.82-6.97 (m, 6H), 7.21-7.26 (m, 2H) 3440, 3011, 2935, 1676, 1612, 1588, 1518, 1473, 1449, 1259, 1238, 1173 cm <sup>-1</sup>
IR (KBr)  TH NARR  TIZ, 211),  TR (CHCI)  TR (CHCI)  TH NARR  TH NARR  (8, 3H), 3.  6.46 (8, 1H  TR (KBr)  TR (KBr)  TH NARR  TR (KBr)  TH NARR  TH	723, 1491, 1476, 1427, 1301, 1276, 1233, 1196, 1168, 1126, 836, 815 cm <sup>-1</sup> \$\delta  1.76 (s, 3H), 1.80 (d, J = 0.6 Hz, 3H), 2.12 (s, 3H), 2.20 (s, 3H), 3.39 (s, 3H), 3.87 (s, 3H), 4.64 (d, J = 6.3 s, 1H), 5.66-5.61 (m, 1H), 6.82-6.97 (m, 6H), 7.21-7.26 (m, 2H)  3440, 3011, 2935, 1676, 1612, 1588, 1518, 1473, 1449, 1259, 1238, 1173 cm <sup>-1</sup>
mp 152-1 111 NMR 11z, 211), 11R (CHCI; mp 123-13 14 NMR ( 3.91 (s, 31) 14 NMR ( (s, 31), 3.7 6.46 (s, 11) 1072, 101 mp 153-16 11 NMR (	δ 1.76 (s, 31!), 1.80 (d, J =0.6 Hz, 31!), 2.12 (s, 31!), 2.20 (s, 3H), 3.39 (s, 3t!), 3.87 (s, 3H), 4.64 (d, J =6.3 s, 1H), 5.66-5.61 (m, 1H), 6.82-6.97 (m, 6H), 7.21-7.26 (m, 2H) 3440, 3011, 2935, 1676, 1612, 1588, 1518, 1473, 1449, 1259, 1238, 1173 cm <sup>-1</sup>
111 NMR (LIC!), (112, 211), (113, 211), (114, 211), (114, 211), (114, 211), (114, 211), (114, 211), (114, 211), (114, 211), (114, 211), (114, 211), (115, 211), (1	δ 1.76 (s, 3H), 1.80 (d, J =0.6 Hz, 3H), 2.12 (s, 3H), 2.20 (s, 3H), 3.39 (s, 3H), 3.87 (s, 3H), 4.64 (d, J =6.3 s, 1H), 5.66-5.61 (m, 1H), 6.82-6.97 (m, 6H), 7.21-7.26 (m, 2H) 3440, 3011, 2935, 1676, 1612, 1588, 1518, 1473, 1449, 1259, 1238, 1173 cm <sup>-1</sup>
Hz, 211), defined in the control of	s, 111), 6.66-5.61 (m, 111), 6.82-6.97 (m, 6H), 7.21-7.26 (m, 2H) 3440, 3011, 2935, 1676, 1612, 1588, 1518, 1473, 1449, 1259, 1238, 1173 cm <sup>-1</sup>
IIR (CHC); mp 123-1; "H NMR ( 3.91 (s, 3); mp 177-1? "H NMR ( (s, 3); 3.9 (s,	3440, 3011, 2935, 1676, 1612, 1588, 1518, 1473, 1449, 1259, 1238, 1173 cm <sup>-1</sup>
mp 123-13 1H NMR (3.91 (s, 3H) 1H NMR ((s, 3H), 3.6.46 (s, 1H) 1R (KBr) 1072, 1011 1H NMR ((s, 1H) 11 (KBr)	
19.01 (s, 3H) mp 177-17 "H NMR (s, 3H), 3. 6.46 (s, 1H) IR (KBr) 1072, 1011 mp 153-16	
3.91 (s, 3H mp 177-17 H NMR (s, 3H), 3. 6.46 (s, 1H IR (KBr) 1072, 101 mp 153-15 H NMR (c)	$ CDC _{3}$ $\delta$ -0.01-0.08 (m, 2H), 0.44-0.50 (m, 2H), 1.01 (m, 1H), 3.21 (s, 3H), 3.34 (d, J = 7.5 Hz, 2H), 3.75 (s, 3H),
mp 177-17 14 NMR ( (s, 3H), 3. 6.46 (s, 14 1R (KBr) 1072, 101 mp 153-16 14 NMR (	3.91 (s, 3H), 5.21 (s, 2H), 6.08 (s, 1H), 6.45 (s, 1H), 6.97.7.04 (m. 3H), 7.26.7.72 (m, 9H)
14 NMR (8, 3H), 3. 6.46 (8, 1H) IR (KBr) 1072, 101 mp 153-16	
(s, 3H), 3. 6.46 (s, 1H IR (KBr) 1072, 101 mp 153-16 1H NMR (	CDCl <sub>3</sub> ) δ 0.27 (t, J = 4.8 Hz, 1H), 0.60 (dd, J = 4.8, 8.7 Hz, 1H), 1.13 (s, 3H), 1.17 (s, 3H), 1.13-1.22 (m, 1H), 3.46
6.46 (s, 1F IR (KBr) 1072, 101 mp 153-16	(s, 3H), 3.75 (s, 3H), 3.80 (s, 3H), 4.00 (dd, J = 7.8, 10.5 Hz, 1H), 4.12 (dd, J = 6.6, 10.5 Hz, 1H), 4.95 (bs, 1H), 5.91 (s, 1H),
IR (KBr) 1072, 101 mp 153-16 'H NMR (	J), 6.91-7.02 (m, 5H), 7.52-7.56 (m, 2H)
mp 153-15	3479, 3434, 3389, 2940, 1614, 1589, 1523, 1490, 1466, 1395, 1361, 1319, 1271, 1238, 1218, 1174, 1137, 1117,
	14 NMR (CDCl3) & 1.76 (e, 3H), 1.80 (e, 3H), 2.25 (e, 3H), 3.80 (e, 3H), 3.89 (e, 3H), 4.63-4.65 (d, J = 6.6 Hz, 2H), 4.80 (br,
1HJ, 5.57 (m, 1HJ, 6.86-	m, 1H), 6.86-6.97 (m, 6H), 7.18 (s, 1H), 7.45-7.48 (m, 2H)
IR' (CHCl <sub>3</sub> ) 3596, 1609,	3596, 1609, 1523, 1493, 1464, 1387, 1256, 1173, 1138, 1042, 1032, 997, 834 cm·l

Table 256

	mp 150-152 °C
	111 NMR (CDCl <sub>3</sub> ) 5 2.25 (s, 311), 3.80 (s, 311), 3.90 (e, 311), 4.74-4.80 (m, 311), 6.26 (t, J = 6.0 Hz, 1H), 6.85-6.92 (m, 6H),
0621-1	7.19 (s, 111), 7.45-7.48 (m, 211)
	IR (CHCh) 3596, 2958, 2938, 1609, 1523, 1493, 1464, 1389, 1328, 1267, 1173, 1140, 1102, 1030, 886, 854, 834 cm <sup>-1</sup>
	mp 117-118 C
	111 NMR ((31)(313) 6 1.76 (9, 311), 1.79 (9, 311), 2.28 (9, 311), 2.31 (9, 313), 3.01 (9, 6H), 3.88 (9, 311), 4.63 (d, J = 6.6Hz, 2H),
1621:	5.53 · 5.60 (m, 1H), 6.76 · 6.96 (m, 5H), 7.15 (s, 2H), 7.28 (d, J = 8.7 Hz, 2H)
	IR (KBr) 1611, 1529, 1490, 1447, 1359, 1322, 1239, 1214, 1193, 1135, 1038,cm <sup>-1</sup>
	mp 116-118 C
	111 NMR (CDCl3) 2.24 (8, 3H), 3.81 (8, 3H), 4.77 (d, J = 6.3 Hz, 2H), 4.90 (br s, 1H), 6.23 (t, J = 6.3 Hz, 1H), 6.83 (s, 1H), 6.90
1.1292	1-1292 (d, J = 8.7 Hz, 2H), 6.99 (t, J = 8.6 Hz, 1H), 7.17 (s, 1H), 7.25 (d, J = 8.7 Hz, 2H), 7.27 (ddd, J = 8.6, 2.1, 1.2 Hz, 1H), 7.37
	(dd, J = 12.6, 2.1 Hz, 1H)
	1R (KBr) 3696, 1731, 1613, 1523, 1493, 1259, 1130, 1033, 886 cm <sup>-1</sup>
	որ 151-154 ℃
000	1H NMR (CDCl <sub>3</sub> ) δ 2.23 (s, 3H), 3.21 (s, 3H), 3.80 (s, 3H), 3.93 (s, 3H), 6.20 (s, 2H), 6.81 (s, 1H), 6.95 (d, J = 8.4 Hz, 1H),
1-1293	7.05 (dd, J = 8.4, 2.1 Hz, 1H), 7.15 (d, J = 2.1 Hz, 1H), 7.21 (s, 1H), 7.30-7.50 (m, 9H)
	IR (KBr) 1490, 1361, 1243, 1148, 1032, 876 cm <sup>-1</sup>
	mp 119-121°C
	1H NMR (CDCl <sub>3</sub> ) δ 1.76 (e, 3H), 1.79 (e, 3H), 2.24 (e, 3H), 3.21 (e, 3H), 3.80 (e, 3H), 3.91 (e, 3H), 4.63 (d, J = 6.5 Hz, 2H),
1.1294	5.56 (t, J = 6.5 Hz, 1H), 6.82 (e, 1H), 6.94 (d, J = 8.4 Hz, 1H), 7.10 (dd, J = 8.4, 1.5 Hz, 1H), 7.13 (d, J = 1.5 Hz, 1H), 7.23 (e,
	111), 7.36 (d, $J = 8.3 \text{ Hz}$ , 2H), 7.43 (d, $J = 8.3 \text{ Hz}$ , 2H)
	IR (KBr) 1519, 1490, 1364, 1156, 1031, 971, 858 cm <sup>-1</sup>

Table 257

mp 135-137 °C  III NMR (CICCla) 6 1.75 (s, 31I), 1.78 (s, 31I), 2.25 (s, 31I), 3.80 (s, 31I), 3.  I-1295 5.56 (t, J = 6.7 Hz, 1H), 6.84 (s, 1H), 6.90 (d, J = 8.7 Hz, 2H), 6.94 (d, J = 8, J = 8, J = 11z, 1H), 7.21 (s, 1H), 7.26 (d, J = 8.7 Hz, 2H)  IR (KBr) 3423, 1609, 1523, 1493, 1258, 1219, 1142, 1033, 834 cm <sup>-1</sup> mp 140-141 °C  III NMR (CIDCla) 6 1.46 (t, J = 6.9 Hz, 31B), 3.46 (s, 3H), 3.75 (s, 3H), 4.13  IR (KBr) 3463, 3433, 1613, 1521, 1491, 1269, 1400, 1267, 1235, 1204, 116  811 cm <sup>-1</sup> mp 204-205 °C  IH NMR (DMSO-de) 6 2.21 (s, 3H), 2.22 (s, 3H), 2.87 (s, 3H), 3.02 (s, 3H)  IR (KBr) 3163, 1644, 1690, 1622, 1487, 1437, 1314, 1264, 1231, 1197, 1127  mp 155-158 °C  IH NMR (CDCla) 6 3.21 (s, 3H), 3.45 (s, 3H), 3.75 (s, 3H), 4.42 (s, 4H), 5.71 (m, 1H), 7.19-7.39 (m, 13H), 7.67-7.72 (m, 2H)  IR (KBr) 3445, 2940, 1615, 1521, 1483, 1367, 1149, 875, 707, 546, 526 cm <sup>-1</sup> mp 174-175 °C  IH NMR (CDCla) 6 2.15 (s, 3H), 3.20 (s, 3H), 3.53 (s, 3H), 3.78 (s, 3H), 4.4.	
	111 NMR (CDCl <sub>3</sub> ) $\delta$ 1.75 (s, 311), 1.78 (s, 311), 2.25 (s, 311), 3.80 (s, 311), 3.90 (s, 311), 4.63 (d, $J = 6.7 \text{ Hz}$ , 2H), 4.95 (s, 1H),
J = 2.1 IIz.  IR (KBr) 3  mp 1:40-14  "II NMR (C (s, 1H), 5.9)  IR (KBr) 3  B11 cm. <sup>1</sup> mp 204-200  "IH NMR (L 4H), 7.13  mp 155-158  mp 155-158  mp 174-175  "IH NMR (C 7.11 (m, 111  IR (KBr) 34  mp 174-175  "IH NMR (C 7.39 (m, 131	6.7 Hz, 1H), 6.84 (s, 1H), 6.90 (d, J = 8.7 Hz, 2H), 6.94 (d, J = 8.3 Hz, 1H), 7.10 (dd, J = 8.3; 2.1 Hz, 1H), 7.13 (d,
	(s, 1H), $7.26$ (d, $J = 8.7$ Hz, $2H$ )
0 - 0 4 - E - 6 - E - 6 :	, 1523, 1493, 1258, 1219, 1142, 1033, 834 cm <sup>-1</sup>
<u> </u>	
0 - 0 4	11 NMR (CDC13) & 1.46 (t, J = 6.9 Hz, 311), 3.46 (s, 311), 3.75 (s, 311), 4.13 (q, J = 6.9 Hz, 2H), 4.77 (d, J = 6.0 Hz, 2H), 5.05
IR (KBr) 3 811 cm <sup>-1</sup> mp 204-20 <sup>1</sup> H NMR (1 4H), 7.13 <sup>1</sup> IR (KBr) 3 <sup>1</sup> mp 155-156 <sup>1</sup> H NMR (7.11 (m, 11 <sup>1</sup> IR (KBr) 3 <sup>1</sup> IR (KBr) 3	1-1296 (s, 1H), 5.95 (s, 1H), 6.25 (t, J = 6.0 Hz, 1H), 6.47 (s, 1H), 6.90-6.97 (m, 3H), 7.01-7.06 (m, 2H), 7.50-7.57 (m, 2H)
811 cm. <sup>1</sup> mp 204-20 1H NMR (1 4H), 7.13 1R (KBr) 3 mp 155-156 1H NMR (C 7.11 (m, 11 1R (KBr) 3 mp 174-171 1H NMR (C 7.39 (m, 13	IR (KBr) 3463, 3433, 1613, 1521, 1491, 1259, 1400, 1267, 1235, 1204, 1167, 1136, 1112, 1097, 1076, 1019, 993, 882, 824,
mp 204-20 1H NMR ( 4H), 7.13 1R (KIST) 3 mp 155-156 1H NMR (C 7.11 (m, 11 IR (KBr) 3 mp 174-176 1H NMR (C	
1H NMR (14H), 7.13 1R (KBr) 3 1R (KBr) 3 1H NMR (6 7.11 (m, 11 1R (KBr) 3 1H NMR (6 1H NMR (6 7.39 (m, 13	
4H), 7.13 mp 155-156 "H NMR (C 7.11 (m, 11 IR (KBr) 3 mp 174-176 "H NMR (C 7.39 (m, 13	OMSO-da) & 2.21 (s, 3H), 2.22 (s, 3H), 2.87 (s, 3H), 3.02 (s, 3H), 4.96 (s, 2H), 6.80-6.86 (m, 2H), 7.05-7.11 (m,
	2H), 7.20-7.27 (m, 1H)
	153, 1644, 1590, 1522, 1487, 1437, 1314, 1264, 1231, 1197, 1127, 1067, 833 cm <sup>-1</sup>
- ' ' - '	
. – –	H NMR (CDCl <sub>3</sub> ) 6 3.21 (s, 3H), 3.45 (s, 3H), 3.75 (s, 3H), 4.42 (s, 4H), 5.93 (s, 1H), 6.44 (s, 1H), 6.90-6.96 (m, 1H), 7.06
	39 (m, 13II), 7.67-7.72 (m, 2H)
	1615, 1521, 1483, 1367, 1149, 875, 707, 546, 526 cm <sup>-1</sup>
	1H NMR (CDCl <sub>3</sub> ) & 2.15 (a, 3H), 3.20 (a, 3H), 3.53 (a, 3H), 3.78 (a, 3H), 4.40 (a, 4H), 6.82 (a, 1H), 6.91-7.01 (m, 2H), 7.11-
	.70 (m, 2H)
IK (KBr) 3028, 2936, 1618, 1520, 1482, 1365, 1176, 11	IR (KBr) 3028, 2936, 1618, 1520, 1482, 1365, 1176, 1151, 1079, 871, 798, 698, 527 cm <sup>-1</sup>

Table 258

·*50* 

	mp 218-221 C
1.1300	111 NMR (CDCE) & 2.69 (8, 311), 3.21 (8, 311), 3.55 (8, 311), 3.77 (8, 311), 6.83 (8, 111), 6.86-6.93 (m, 1H), 7.02-7.15 (m, 2H),
-	7.35-7.41 (m, 2H), 7.66-7.71 (m, 2H)
	IR (KBr) 3435, 3389, 2940, 1635, 1525, 1362, 1175, 1152, 1076, 962, 874, 802, 527 cm <sup>-1</sup>
	mp 209-211 С
	111 NMR (CDCh) 6 2.91 (8, 3H), 3.22 (8, 3H), 3.54 (8, 3H), 3.78 (8, 3H), 6.86 (8, 1H), 7.26-7.33 (m, 2H), 7.37-7.42 (m, 2H),
	7.64-7.71 (m, 211), 8.15 (s, 111), 8.34-8.41 (m, 111)
	IR (KBr) 3336, 2943, 1736, 1539, 1480, 1356, 1174, 1151, 1077, 881, 799, 523, 507 cm <sup>-1</sup>
	powder
3000	111 NMR (CDCLs) 6 1.50 (8, 3H), 1.71 (8, 3H), 2.78 (8, 3H), 3.23 (8, 3H), 3.55 (8, 3H), 3.78 (8, 3H), 4.11-4.20 (m, 1H), 4.54-
1-1302	4.63 (m, 1H), 5.20-5.28 (m, 1H), 6.87 (s, 1H), 7.25-7.31 (m, 3H), 7.37-7.42 (m, 2H), 7.66-7.72 (m, 2H)
	IR (KBr) 2941, 1702, 1482, 1369, 1203, 1176, 1152, 1080, 964, 873, 797, 525 cm <sup>-1</sup>
	mp 133-136 C
5001	<sup>1</sup> II NMR (CDCl <sub>1</sub> ) δ 1.73 (s, 3H), 1.77 (s, 3H), 3.45 (s, 3H), 3.74-3.78 (m, 5H), 4.96 (s, 1H), 5.34-5.42 (m, 1H), 5.94 (s, 1H),
1.1303	6.45 (s, 111), 6.75-6.81 (m, 1H), 6.89-6.95 (m, 2H), 7.10-7.18 (m, 2H), 7.51-7.56 (m, 2H)
	IR (KBr) 3401, 2935, 1626, 1614, 1627, 1490, 1402, 1267, 1223, 1113, 1071, 1005, 829, 589 cm <sup>-1</sup>
	mp 170-171 °C
	1H NMR (CDCl3) 6 2.11 (8, 3H), 3.47 (8, 3H), 4.40 (8, 4H), 4.91 (8, 1H), 5.81 (8, 1H), 6.77 (8, 1H), 6.86-7.08 (m, 5H), 7.22-
1.1304	7.33 (m, 10H), 7.48-7.53 (m, 2H)
	IR (KBr) 3483, 3029, 1612, 1523, 1489, 1453, 1400, 1265, 1215, 834, 749, 698, 494, 526 cm <sup>-1</sup>

Table 259

1-1305	mp 166-168 °C <sup>1</sup> H NMR (CDCb <sub>3</sub> )
1.1306	mp 210-212 °C 111 NMR (CDCl <sub>3</sub> )
1.1307	mp 171-173 °C <sup>1</sup> H NMR (CDCl <sub>3</sub> )
1.1308	powder  1H NMR (CDCl <sub>3</sub> ) & 1.47 (s, 3H), 1.70 (s, 3H), 2.11 (s, 3H), 2.67-3.15 (m, 3H), 3.22 (s, 3H), 3.56 (s, 3H), 4.13-4.22 (m, 1H), 4.54-4.63 (m, 1H), 5.21-5.28 (m, 1H), 7.09-7.42 (m, 6H), 7.63-7.71 (m, 2H)  IR (CHCl <sub>3</sub> ) 2940, 1700, 1519, 1478, 1372, 1175, 1151, 968 cm <sup>-1</sup>
[-1309	mp 139·141 °C. <sup>1</sup> H NMR (CDCl <sub>3</sub> ) δ 1.74 (s, 3H), 1.78 (s, 3H), 2.13 (s, 3H), 3.48 (s, 3H), 3.77 (d, J = 6.6 Hz, 2H), 4.70·5.20 (br s, 1H), 5.35·5.42 (m, 1H), 5.77 (s, 1H), 6.77·6.83 (m, 2H), 6.88·6.99 (m, 4H), 7.48·7.54 (m, 2H) <sup>1</sup> IR (KBr) 3525, 3377, 2931, 1625, 1626, 1488, 1222, 1164, 1011, 833 cm <sup>-1</sup>
	IR (KBr) 3525, 3377, 2931, 1625, 1626, 1488, 1222, 1164, 1011, 833 cm <sup>-1</sup>

Table 260

	mp 177-179 C.
	11 NMR (CDCL <sub>3</sub> ) $\delta$ 1.76 (8, 311), 1.81 (8, 311), 3.20 (t, J = 8.4 Hz, 211), 3.21 (t, J = 8.4 Hz, 211), 4.521 (d, J = 7.2 Hz, 2H),
1.1310	1-1310 4.523 (t, J = 8.4 Hz, 2H), 4.90 (hrs, 1H), 5.53 (t, J = 6.8 Hz, 1H), 6.71 (s, 1H), 6.89 (d, J = 8.4 Hz, 2H), 6.98 (d, J = 8.7 Hz,
	2H), 7.41 (d, J = 8.7 Hz, 2H), 7.45 (d, J = 9.0 Hz, 2H)
	IR (KBr) 3389, 2971, 2911, 1611, 1525, 1394, 1238, 1175, 997, 828 cm <sup>-1</sup>
	mp 175-177 ℃
	111 NMR (CDC3) 6 3.20 (t, J = 8.3 Hz, 4H), 4.53 (t, J = 8.4 Hz, 4H), 4.70 (d, J = 6.3 Hz, 2H), 4.88 (brs, 1H), 6.19 (t, J = 6.2
1:1311	Hz, 1H), 6.89 (d, J = 8.7 IIz, 2H), 6.96 (d, J = 9.0 Hz, 2H), 7.41 (d, J = 9.0 Hz, 2H), 7.47 (d, J = 8.7 Hz, 2H)
	IR (KBr) 3409, 3269, 2934, 2901, 1524, 1480, 1395, 1235, 1223, 1003, 881, 817 cm <sup>-1</sup>
	mp 186-187 ℃
	11 NMR (CDCL3) 6 2.06 (s, 3H), 2.16 (s, 3H), 4.72 (s, 1H), 4.80 (d, J=6.3 Hz, 2H), 4.83 (s, 1H), 6.25 (t, J=6.3 Hz, 1H), 6.76
2181.1	(s, 111), 6.86-6.92 (m, 211), 7.03-7.13 (m, 3H), 7.21-7.26 (m, 2H)
	IR (CHCl <sub>3</sub> ) 3689, 3598, 3551, 3024, 3008, 1732, 1614, 1520, 1487, 1260, 1223 cm <sup>-1</sup>
	mp 201 °C
	1H NMR (CDCl3) & 2.08 (9, 3H), 2.17 (6, 3H), 3.88 (9, 3H), 4.80 (d, J=6.3 Hz, 2H), 4.90 (br s, 1H), 4.99 (8, 1H), 6.26 (t, J
1.1313	=6.3 Hz, 1H), 6.77 (s, 1H), 6.85-6.92 (m, 4H), 7.01 (d, J =6.9 Hz, 1H), 7.22-7.27 (m, 2H)
	IR (CHCl <sub>3</sub> ) 3688, 3598, 3538, 3024, 3014, 2938, 1731, 1631, 1520, 1488, 1240, 1172 cm <sup>-1</sup>
	mp 132-134 °C
	1H NMR (CDCl <sub>3</sub> ) δ 2.12 (6, 3H), 2.29 (8, 3H), 3.00 (6, 6H), 3.74 (br, 2H), 6.62 (dd, J = 2.4, 8.1 Hz, 1H), 6.77·6.82 (m, 3H),
1-1314	7.01-7.05 (m, 2H), 7.12 (s, 1H), 7.26-7.31 (m, 2H)
	IR (KBr) 3600-2800(br), 1610, 1523, 1483, 1443, 1325, 1297 cm <sup>-1</sup>

Table 261

50	45	40	35	30	25	20	15	10	5
1.1316	mp 123-125 °C 'II NMR (CDCh.)	) δ 2.13 (s, ; )-7.13 (m, 2H), 300(br), 1609,	3H), 2.29 (m, 4 7.25-7.32 (m, 1625, 1488, 14	111), 3.00 (s, 6) 211) 143, 1366, 123	II), 3.98 (br, 5	ગા), 6.63 (વત, J	= 2.4, 8.1 H2	2.13 (s, 3H), 2.29 (m, 4H), 3.00 (s, GH), 3.98 (br, 3H), 6.63 (dd, J = 2.4, 8.1 Hz, 1H), 6.77-6.81 (m, 3H), (m, 2H), 7.25-7.32 (m, 2H)  7), 1609, 1625, 1488, 1443, 1366, 1232, 1194 cm-1	l (m, 3H),
1.1316		7 °C 3DCl <sub>3</sub> ) & 2.10 (8, 3H), 2.31 (8, 3H), 3.01 (8, 6H), 6.77-6.84 = 3.0 , 12.9 Hz, 1H), 7.09 (d, J = 3.0 Hz, 1H), 7.95 (br s, 1H) 600-2800(br), 1707, 16H1, 1528, 1484, 1350, 1279, 1229, 119	HI), 2.31 (e, 3  , 7.09 (d, J = 3	II), 3.01 (a, 6F .0 Hz, 1H), 7.: 184, 1350, 127	D, 6.77-6.84 ( 95 (br s, 1H) 9, 1229, 1196	(m, 2H), 7.00 (e 5, 1164 cm <sup>.1</sup>	3, 111), 7.16 (8	2.10 (s, 3H), 2.31 (s, 3H), 3.01 (s, 6H), 6.77-6.84 (m, 2H), 7.00 (s, 1H), 7.15 (s, 1H), 7.27-7.33 (m, 3H), 1Hz, 1H), 7.09 (d, J = 3.0 Hz, 1H), 7.95 (br s, 1H)  r), 1707, 16H1, 1528, 1484, 1350, 1279, 1229, 1196, 1154 cm <sup>-1</sup>	l (m, 3H),
I-1317	mp 94-95 111 NMR (6 6.89 (m, 31	T CDCla) & 1.77 (s, 31 4), 6.97-7.16 (m, 6H)	II), 1.81 (s, 3H	), 2.26 (s, 6H)	), 4.63 (d, J =	6.6 Hz, 2H), 6	.51 - 5.60 (m,	1H), 6.01 (e, 2]	Н), .6.78-
1.1318	1H NMR (6	) & 1.77 (s, 3 n, 2H), 7.49 (d	(H), 1.82 (s, 3]	H), 2.29 (s, 6) .3 Hz, 1H), 7.	H), 4.64 (d, J 80 (s, 1H), 7.9	CDCl <sub>3</sub> ) 6 1.77 (g, 3H), 1.82 (g, 3H), 2.29 (g, 6H), 4.64 (d, J = 6.3 Hz, 2H), 5.53 7.39 (m, 2H), 7.49 (d.d, J = 5.4 & 0.3 Hz, 1H), 7.80 (g, 1H), 7.92 (d, J = 8.1 Hz, 1H)	, 5.53 - 5.60 [z, 1H)	CDCl <sub>3</sub> ) δ 1.77 (8, 3H), 1.82 (8, 3H), 2.29 (8, 6H), 4.64 (d, J = 6.3 Hz, 2H), 5.53 · 5.60 (m, 1H), 6.99 · 7.21 (m, 7.39 (m, 2H), 7.49 (d.d, J = 5.4 & 0.3 Hz, 1H), 7.80 (8, 1H), 7.92 (d, J = 8.1 Hz, 1H)	7.21 (m,
F.1319	mp 188-189 1H NMR (C 6.83 (d, J = (d, J = 8.7 I IR(KBr) 34	) C 3DCl <sub>3</sub> ) & 1.31 (t, J = 7.5 Hz, 3H), 2.26 (s, 3H), 2.29 (s, 3H), 2.68 (s, 3Hz, 1H), 6.98-7.00 (m, 2H), 7.13 (d, J = 9.0 Hz, 2H), 7.26-7.30 Hz, 1H)  Hz, 1H)  144, 3269, 1710, 1533, 1487, 1269, 1244, 1199, 1174, 744, 697 cm <sup>-1</sup>	= 7.5 Hz, 3H), 00 (m, 2H), 7.1 3, 1487, 1269,	2.26 (s, 3H), 13 (d, J = 9.0 l	2.29 (s, 3H), Hz, 2H), 7.26- 174, 744, 697	2.68 (q, J = 7.5 .7.30 (m, 2H), '	, Hz, 2H), 6.1 7.38-7.48 (m,	°C (DCl <sub>3</sub> ) & 1.31 (t, J = 7.5 Hz, 3H), 2.26 (s, 3H), 2.29 (s, 3H), 2.68 (q, J = 7.5 Hz, 2H), 5.17 (s, 2H), 5.70 (brs, 1H), 6.8 Hz, 1H), 6.98·7.00 (m, 2H), 7.13 (d, J = 9.0 Hz, 2H), 7.26·7.30 (m, 2H), 7.38·7.48 (m, 5H), 7.78 (brs, 1H), 1z, 1H) 44, 3269, 1710, 1533, 1487, 1269, 1244, 1199, 1174, 744, 697 cm <sup>-1</sup>	brs, 1H), 1H), 7.86
I-1320		δ 1.30 (t, J , 7.14 (d, J = 7 60, 1707, 1519	= 7.6 Hz, 3H) .6 Hz, 2H), 7.: 1, 1501, 1488,	, 2.27 (s, 3H), 25-7.51 (m, 71 1260, 1241, 11	2.28 (s, 3H), 1), 7.79 (brs, 213, 1172, 74	, 2.68 (q, J = 7 1H), 7.86 (d, J 4, 697 cm <sup>-1</sup>	.2 Hz, 2H), 3. = 8.8 Hz, 1H	91 (s, 3H), 6.21 )	l (s, 2H),

Table 262

	mp186-187 ℃
	HI NMR (CDC3a) $\delta$ 1.30 (t, $J = 8.4$ Hz, 3H), 2.26 (s, 3H), 2.27 (s, 3H), 2.68 (q, $J = 7.5$ Hz, 2H), 5.20 (s, 2H), 7.04-7.14 (m, 3.11)
1-1321	6H), 7.26-7.50 (m, 6H), 7.79 (brs, 1H), 7.86 (d, J = 8.7 Hz, 1H)
	HR(KBr) 3436, 3266, 1709, 1536, 1521, 1487, 1267, 1199, 1176, 744, 697 cm <sup>-1</sup>
	inp136-137 C
	111 NMR (CDCh.) 6 1.32 (t, J = 7.5 Hz, 3II), 2.28 (e, 3H), 2.30 (e, 3H), 2.70 (q, J = 7.5 Hz, 2H), 3.13 (e, 3H), 5.19 (e, 2H),
1.1.522	7.12-7.15 (m, 311), 7.26-7.29 (m, 311), 7.37-7.50 (m, 511), 7.80 (brs, 1H), 7.87 (d, J = 9.0 Hz, 1H)
	IR(KBr) 3435, 1725, 1536, 1486, 1363, 1292, 1266, 1179, 1163, 1108, 7970, 895, 811, 525 cm <sup>-1</sup>
	mp150-151 ℃
0001	<sup>1</sup> H NMR (CDCl <sub>3</sub> ) δ 2.18 (s, 3H), 2.27 (s, 3H), 5.20 (s, 2H), 7.04-7.14 (m, 6H), 7.26-7.50 (m, 6H), 7.60 (d, J = 12.0 Hz, 1H),
1-1323	7.94 (brs, 1H)
	IR(KBr) 3421, 3302, 1712, 1523, 1490, 1422, 1299, 1274, 1205, 1176, 1132, 743, 697 cm <sup>-1</sup>
	mp83.84 °C
	<sup>1</sup> H NMR (CDCl <sub>3</sub> ) δ 1.30 (t, J = 7.6 Hz, 3H), 1.77 (s, 3H), 1.78 (s, 3H), 1.81 (s, 6H), 2.31 (s, 3H), 2.34 (s, 3H), 2.56 (g, J = 7.6
1-1324	1-1324 Hz, 2H), 3.80 (d, J = 6.4 Hz, 2H), 3.90 (s, 3H), 4.65 (d, J = 6.2 Hz, 2H), 5.44 (d, J = 6.2 Hz, 2H), 5.44 (t, J = 5.2 Hz, 1H), 5.59
	(t, J = 5.4 Hz, 1H), 6.73 (d, J = 8.0 Hz, 1H), 6.92.6.94 (m, 3H), 7.12.7.20 (m, 4H)
	IR(KBr) 3428, 3374, 2964, 1607, 1519, 1494, 1458, 1311, 1256, 1239, 1139, 1036, 1002, 855, 820 cm <sup>-1</sup>
	mp113-114 C
	1H NMR (CDCl <sub>3</sub> ) 6 1.30 (t, J = 7.4 Hz, 3H), 1.76 (s, 3H), 1.78 (s, 3H), 1.80 (s, 3H), 1.84 (s, 3H), 2.30 (s, 3H), 2.32 (s, 3H),
1.1325	1.1325 2.55 (q, J = 7.6 Hz, 2H), 3.79 (d, J = 6.6 Hz, 2H), 4.63 (d, J = 6.6 Hz, 2H), 5.43 (t, J = 5.6 Hz, 1H), 5.55 (t, J = 6.6 Hz, 1H),
	5.73 (brs, 1H), 6.72 (d, J = 8.0 Hz, 1H), 6.83-6.98 (m, 3H), 7.11-7.19 (m, 4H)
	IR(KBr) 3413, 3298, 2965, 2924, 1518, 1494, 1435, 1242, 1127, 1013, 883 cm·l

Table 263

mp81-82 C  11 NMR (CIDCla) \(\phi\) 1.29 (t, J = 7.4 Hz, 3H),  1-1326 2.54 (q, J = 7.2 Hz, 2H), 3.79 (d, J = 7.2 Hz, 2  6.71 (d, J = 8.0 Hz, 1H), 7.04-7.19 (m, 7H)  1R(KBr) 3413, 2969, 2912, 2856, 1613, 1520, 1  mp94-95 \(\text{C}\)  11 NMR (CIDCla) \(\phi\) 1.74 (s, 3H), 1.77 (s, 6H),  12, 211), 5.35 (t, J = 6.9 Hz, 1H), 5.55 (t, J = 6.3  1R(KBr) 3423, 2967, 2918, 1627, 1525, 1488, 11  mp 178-180°C (decomp.)  14 NMR (DMSO-de) \(\phi\) 3.30 (s, 3H), 3.64 (s, 3)  16, J = 2.1 Hz, 1H), 6.84 (d, J = 8.7 Hz, 2H), 6.9  11 (Nujol) 3.487, 3.382, 1696, 1670, 1591, 1623, 187 (d, J = 2.1 Hz, 1H), 6.86 (d, J = 8.7 Hz, 2H), 7.0  11 (Nujol) 3.388, 3.333, 3270, 1671, 1614, 1679, 18 185-187°C  14 NMR (CDCla) \(\phi\) 1.79 (t, J = 2.6 Hz, 3H), 2  1-1330 4.17 (t, J = 6.6 Hz, 2H), 6.84 (s, 1H), 7.08 (d, J = 2.6 Hz, 3H), 2  1-1330 4.17 (t, J = 6.6 Hz, 2H), 6.84 (s, 1H), 7.08 (d, J = 2.6 Hz, 3H), 2  1-1330 4.17 (t, J = 6.6 Hz, 2H), 6.84 (s, 1H), 7.08 (d, J = 2.6 Hz, 3H), 2	
1H NMR (6.71 (d, J) (6.71 (d, J) (6.71 (d, J) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1	
2.54 (q, J 6.71 (d, Ja IR(KBr) 3 mp94-95 'II NMR ( II2, 211), 5 IR(KBr) 3 mp 178-18 'IH NMR ( (d, J = 2.1 IR (Nujol) mp 205-21 'IH NMR ( (d, J = 2.1 IR (Nujol) mp 185-18 mp 185-18	(CDCk) $\delta$ 1.29 (t, $J = 7.4$ Hz, 3H), 1.74 (s, 3H), 1.77 (s, 3H), 1.78 (s, 3H), 1.81 (s, 3H), 2.27 (s, 3H), 2.31 (s, 3H),
6.71 (d, J) mp94.95 mp94.95 iii NMR (c) Hz, 211), 5 iii (KBr) 3 mp 178.18 iii (Nujol) mp 205.21 iii (Nujol) mp 185.18 iii (Nujol) mp 185.18	= 7.2 Hz, 2H), 3.79 (d, J = 7.2 Hz, 2H), 4.63 (d, J = 6.6 Hz, 2H), 5.42 (t, J = 6.4 Hz, 1H), 5.55 (t, J = 6.6 Hz, 1H),
	19 (m, 7H)
	IR(KBr) 3413, 2969, 2912, 2856, 1613, 1520, 1492, 1295, 1261, 1127, 1004, 881, 813 cm 1
	·
	111 NMR (CDCl <sub>3</sub> ) & 1.74 (s, 3H), 1.77 (s, 6H), 1.81 (s, 3H), 2.21 (s, 3H), 2.26 (s, 3H), 3.72 (d, J = 6.9 Hz, 2H), 4.63 (d, J = 6.3
IR(KBr) 3 TH NMR (1 (d, J = 2.1) IR (Nujol) TH NMR (1 (d, J = 2.1) TH NMR (1 (d, J = 2.1) TH (Nujol) TH 185-18 TH NMR (6	35 (t, J = 6.9  Hz, 111), 5.55 (t, J = 6.9  Hz, 111), 6.37.6.48 (m, 2H), 7.01.7.13 (m, 6H)
mp 178-18 'H NMR (1 (d, J = 2.1) IR (Nujol) mp 205-21 'H NMR (1 (d, J = 2.1) IR (Nujol) mp 185-18 'H NMR ((1, J) = 4.17 (t, J)	IR(KBr) 3423, 2967, 2918, 1627, 1525, 1488, 1296, 1267, 1129, 981, 837, 805 cm <sup>-1</sup>
(d, J = 2.1]  IR (Nujol)  mp 205-21  'H NMR (f  (d, J = 2.1)  IR (Nujol)  mp 185-18  'H NMR (f  4.17 (f, J =	
(d, J = 2.1 IR (Nujol) mp 205-21 'H NMR (I (d, J = 2.1 IR (Nujol) mp 185-18 'H NMR ((	DMSO-d6) 8 3.30 (8, 3H), 3.64 (8, 3H), 4.45 (8, 2H), 5.65 (8, 2H), 6.39 (8, 1H), 6.65 (dd, J = 8.4, 2.1 Hz, 1H), 6.74
IIR (Nujol) mp 205-21 'H NMR (f (d, J = 2.1 IIR (Nujol) mp 185-18 'H NMR (f 4.17 (f, J =	Hz, 1H), 6.84 (d, J = 8.7 Hz, 2H), 6.99 (d, J = 8.4 Hz, 1H), 7.43 (d, J = 8.7 Hz, 2H), 9.26 (g, 1H)
mp 205-21 1H NMR (I (d, J = 2.1 1R (Nujol) mp 185-18 1H NMR ((	3487, 3382, 1696, 1670, 1691, 1523, 1491, 1468, 1243, 1202, 1114, 1077, 1013, 937, 811 cm <sup>-1</sup>
(d, J = 2.1 (IR (Nujol) mp 185-18 'H NMR ((	
(d, J = 2.1 IR (Nujol) mp 185-18 <sup>1</sup> H NMR (f 4.17 (t, J =	OMSO-d6) 6 3.34 (8, 3H), 3.44 (8, 3H), 3.67 (8, 3H), 4.93 (8, 2H), 6.43 (8, 1H), 6.76 (dd, J = 8.4, 2.1 Hz, 1H), 6.85
IR (Nujol) 3338, 3333, 3270, 1671, 1614, 1579, mp 185-187°C <sup>1</sup> H NMR (CDCl <sub>3</sub> ) δ 1.79 (t, J = 2.6 Hz, 3H), 2 <sup>1</sup> I-1330 4.17 (t, J = 6.6 Hz, 2H), 6.84 (s, 1H), 7.08 (d, J = 1.1)	Hz, 1H), 6.86 (d, J = 8.7 Hz, 2H), 7.04 (d, J = 8.4 Hz, 1H), 7.46 (d, J = 8.7 Hz, 2H)
mp 185-187°C  'H NMR (CDCl <sub>3</sub> )	3388, 3333, 3270, 1671, 1614, 1679, 1666, 1623, 1443, 1223, 1172, 1121, 1033, 922, 813 cm <sup>-1</sup>
<sup>1</sup> H NMR (CDCl <sub>3</sub> ) δ 1.79 (t, J = 2.6 Hz, 3H), 2 1.1330 4.17 (t, J = 6.6 Hz, 2H), 6.84 (s, 1H), 7.08 (d, J =	
	1H NMR (CDCl <sub>3</sub> ) 6 1.79 (t, J = 2.6 Hz, 3H), 2.69 (m, 2H), 2.75 (s, 3H), 3.21 (s, 3H), 3.29 (s, 3H), 3.66 (s, 3H), 3.77 (s, 3H),
	6.6 Hz, 2H), 6.84 (s, 1H), 7.08 (d, J = 9.0 Hz, 1H), 7.36 (dd, J = 9.0, 2.1 Hz, 1H), 7.38 (d, J = 8.7 Hz, 2H), 7.40 (d,
J = 2.1  Hz, 111, 7.68 (d, J = 8.7  Hz, 2H)	нz, 2Н)
IR (Nujol) 1604, 1520, 1480, 1175, 1151, 1081,	1604, 1520, 1480, 1175, 1151, 1081, 1012, 971, 948, 878, 840, 807 cm <sup>-1</sup>

Table 264

. 35

	foam
	III NMR (CDCl <sub>3</sub> ) $\delta$ 1.81 (t, J = 2.4 Hz, 3H), 2.65 (m, 2H), 3.45 (s, 3H), 3.74 (s, 3H), 4.16 (t, J = 6.6 Hz, 2H), 6.45 (s, 1H),
15:1:1	6.92 (d, J = 8.7 Hz, 2H), 6.95 (m, 2H), 7.07 (brs, 1H), 7.07 (d, J = 8.7 Hz, 2H)
	IR (Nujol) 3427, 1612, 1586, 1523, 1489, 1251, 1224, 1113, 1071, 1012 cm. <sup>1</sup>
	foam
	111 NMR (CDCM) $\delta$ 3.45 (8, 311), 3.75 (8, 311), 4.16 (m, 211), 4.76 (m, 211), 5.89~6.02 (m, 211), 6.45 (8, 111), 6.92 (d, J = 8.7)
1.1332	Hz, 211), 6.96 (m, 211), 7.09 (brs, 111), 7.53 (d, J = 8.7 11z, 2H)
	IR (Nujol) 3433, 1612, 1588, 1523, 1489, 1286, 1248, 1224, 1175, 1113, 1070, 1011 cm <sup>-1</sup>
	foam
	"H NMR (CDC13) $\delta$ 3.45 (8, 3H), 3.74 (8, 3H), 4.11 (m, 2H), 4.67 (m, 2H), 5.96~6.12 (m, 2H), 6.45 (8, 1H), 6.92 (d, $J = 8.7$
1.1333	Hz, 2H),6.92 (d, J = 8.4 Hz, 1H), 6.96 (dd, J = 8.4, 2.1 Hz, 1H), 7.08 (d, J = 2.1 Hz, 1H), 7.53 (d, J = 8.7 Hz, 2H)
	IR (Nujol) 3434, 1612, 1588, 1523, 1489, 1285, 1248, 1224, 1174, 1112, 1070, 1011 cm <sup>-1</sup>
	foam
	111 NMR (CDCl <sub>3</sub> ) 6 1.95 (e, 311), 3.45 (e, 311), 3.75 (e, 311), 4.11 (e, 211), 4.68 (d, J = 6.9 Hz, 211), 5.75 (d, J = 6.9 Hz, 111),
1.1334	6.45 (s, 1H), 6.91 (d, J = 8.7 Hz, 2H), 6.96 (s, 2H), 7.08 (s, 1H), 7.53 (d, J = 8.7 Hz, 2H)
	IR (KBr) 3390, 1612, 1585, 1523, 1491, 1225, 1072, 1003, 822 cm <sup>-1</sup>
	m.p 179.180 °C
	1H NMR (CDCl3) 6 1.88 (s, 3H), 3.45 (s, 3H), 3.75 (s, 3H), 4.07 (s, 2H), 4.69 (d, J=6.6 Hz, 2H), 5.89 (d, J=6.6 Hz, 1H),
1.1335	1-1335 6.45 (a, 1H), 6.91 (d, J = 8.7 Hz, 2H), 6.92 (d, J = 8.4 Hz, 1H), 6.96 (dd, J = 1.8, 8.4 Hz, 1H), 7.07 (d, J = 1.8 Hz, 1H), 7.53 (d, J = 1.8
	J = 8.7  Hz, 2H
	IR (KBr) 3392, 1609, 1684, 1623, 1492, 1226, 1116, 1072, 1002, 813, 782 cm. 1

Table 265

50	45	40	<i>35</i>	30	25	20	15	10	5
-136	foam '!! NMR (CD30D) & 3.38 (8, 3H), 3.67 (8, 3H), 3.88 (dd, J = 7.8, 9.9 Hz, 1H), 4.10 (dd, J = 3.6, 9.9 Hz, 1H), 4.51 (m, 1H), 5.25 (dt, J = 10.5, 1.5 Hz, 1H), 5.44 (dt, J = 17.4, 1.5 Hz, 1H), 6.00 (ddd, J = 5.4, 10.5, 17.4 Hz, 1H), 6.43 (dt, J = 17.4, 1.5 Hz, 1H), 6.00 (ddd, J = 5.4, 10.5, 17.4 Hz, 1H), 6.43 (dt, J = 17.4, 1.5 Hz, 1H), 6.43 (dt, J = 17.4, 1.	)) & 3.38 (s, 31	l), 3.67 (s, 311	), 3.88 (dd, J =	7.8, 9.9 Hz, 1	II), 4.10 (dd, J	= 3.6, 9.9 Hz	, 111), 4.51 (n	1H),
	1.8, 8.4 Hz, 1H), 6.85 (d, J = 8.7 Hz, 2H), 6.86 (d, J = 1.8 Hz, 1H), 6.92 (d, J = 8.4 Hz, 1H), 7.45 (d, J = 8.7 Hz, 2H) HR (KBr) 3399, 2934, 1612, 1688, 1623, 1489, 1264, 1114, 1071, 1012, 939, 816 cm.	3.85 (d, J = 8.7 l	1z, 2H), 6.86 ( 1523, 1489, 1	(d, J = 1.8 Hz, 1254, 1114, 107	III), 6.92 (d, J	= 8.4 Hz, 1H),	7.45 (d, J = 8.	8, 111,, 0.75 (a 7 Hz, 2H)	j
200		6 3.45 (s, 3H),	3.75 (s, 3H),	4.20 (t, J = 2.1	Hz, 2H), 4.84	(t, J = 2.1 Hz,	2H). 6.45 (s. 1	H). 6.92 (d)	7.8
1551		J = 2.1, 8.4 Hz, 12, 1589, 1523,	1H), 7.04 (d, 1489, 1404, 1	J = 8.4  Hz, 1H, $224, 1113, 107$	3, 7.09 (d, J = 3)	2.1 Hz, 1H), 7.4	15 (d, J = 8.7 F	łz, 2H)	;
	foam 1H NMR (CD3OD) 8 3.38 (8, 3H), 3.67 (8, 3H), 4.25 (d, J = 21.0 Hz, 2H), 4.84 (d, J = 7.5 Hz, 2H), 5.58 (dt. J = 19.5, 7.5 Hz	) & 3.38 (s, 3H	), 3.67 (s, 3H)	, 4.25 (d, J = 21	.0 Hz, 2H), 4.	84 (d, J = 7.5 H	(z. 2H), 5.58 (d	lt. J = 19.5. 7	H <sub>2</sub>
1338	-	6.79 (dd, J = 2.; , 2H)	1, 8.4 Hz, 1H)	, 6.84 (d, J = 8	.7 Hz, 2H), 6.0	36 (d, J = 2.1 F	Iz, 1H), 6.96 (	d, J = 8.4 Hz	1H)
	IR (KBr) 3409, 1701, 1612, 1691, 1523, 1489, 1404, 1246, 1113, 1071, 1010, 939, 816 cm.	01, 1612, 1591,	1523, 1489, 1	404, 1246, 1113	3, 1071, 1010,	939, 816 cm <sup>-1</sup>			
	foam								
339	$ \begin{vmatrix} 1 & 11 & 11 & 11 \\ 11 & 11 & 11 \\ 12 & 11 & 11$	δ 3.44 (s, 3H), H), 6.95 (d, J = 8	3.74 (s, 3H), 4 3.7 Hz, 2H), 6.	1.21 (d, J = 21.3 96 (d, J = 8.4 H	3 Hz, 2H), 4.66 [z, 1H), 6.98 (ö	(dd, J = 1.8, 7 (d, J = 1.5, 8.4)	.5 Hz, 2H), 6.7 Hz, 1H), 7.09	70 (dt, J = 16.	5, 7.5 1H).
	7.51 (d, J = 8.7 Hz, 2H) 1R (KBr) 3411, 1698, 1611, 1588, 1522, 1488, 1223, 1112, 1070, 1011, 939, 895, cm.	, 2H) 98, 1611, 1588.	1522, 1488, 15	223, 1112, 1070	. 1011 939 A	9. m.1			
	mp 171-172 C								T
340	<sup>1</sup> H NMR (CDCl <sub>3</sub> ) δ 1.50 (e, 3H), 1.67 (s, 3H), 1.96 (s, 3H), 3.45 (s, 3H), 3.77 (s, 3H), 4.13-4.49 (m, 2H), 5.23-5.30 (m, 1H),	δ 1.50 (s, 3H),	1.67 (s, 3H),	1.96 (s, 3H), 3.	45 (s, 3H), 3.7	7 (8, 3H), 4.13-	4.49 (m, 2H),	5.23-5.30 (m,	1H).
2 5	5.59 (s, 1H), 6.13 (s, 1H), 6.47 (s, 1H), 6.92.6.98 (m, 2H), 7.18-7.35 (m, 3H), 7.50-7.57 (m, 2H)	s, 1H), 6.47 (s, 1	H), 6.92-6.98	(m, 2H), 7.18-7	7.35 (m, 3H), 7	.50-7.57 (m, 2]	Æ		
	IR (KBr) 3390, 3140, 2935, 1640, 1523, 1401, 1240, 1119, 1070, 835, 820 cm <sup>-1</sup>	10, 2935, 1640, 1	1523, 1401, 12	340, 1119, 1070	, 835, 820 cm				

Table 266

mp 216-218 T 11 NMR (CDC 1-1341 (m, 1H), 6.79 (e 1R (KBr) 3337, mp 103-105 T 11 NMR (CDC 1-1342 8.7 Hz, 2H), 7.0 IR (KBr) 3429, IR (KBr) 3429,	mp 216-218 °C.  111 NMR (CDCl <sub>3</sub> +CD3OD)
	CDCl <sub>3</sub> +CD3OD)
·	3337, 3099, 2928, 1637, 1608, 1587, 1521, 1444, 1409, 1261, 1232, 1161, 836, 769, 692, 540 cm <sup>-1</sup> 35 °C CDCl <sub>3</sub> ) δ 1.15 (d, J = 6.8 Hz, 6H), 2.26 (a, 3H), 3.08 (aept, J = 6.8 Hz, 1H), 4.94 (a, 1H), 5.20 (a, 2H), 6.88 (d, J = 4), 7.04-7.07 (m, 3H), 7.12-7.18 (m, 1H), 7.18 (a, 1H), 7.20 (d, J = 8.7 Hz, 2H), 7.32-7.51 (m, 5H) 3429, 1522, 1490, 1262, 1227, 1128, 1011, 833 cm <sup>-1</sup>
<del>-  </del>	1337, 3099, 2928, 1637, 1608, 1587, 1521, 1444, 1409, 1261, 1232, 1161, 836, 769, 592, 540 cm <sup>-1</sup> 35 °C  CDCl <sub>3</sub> )
	75 °C CDC13) & 1.15 (d, J = 6.8 Hz, 6H), 2.26 (s, 3H), 3.08 (sept, J = 6.8 Hz, 1H), 4.94 (s, 1H), 5.20 (s, 2H), 6.88 (d, J = 1), 7.04-7.07 (m, 3H), 7.12-7.18 (m, 1H), 7.18 (s, 1H), 7.20 (d, J = 8.7 Hz, 2H), 7.32-7.51 (m, 5H)  3429, 1522, 1490, 1262, 1227, 1128, 1011, 833 cm <sup>-1</sup> 17 °C
	CDCI <sub>3</sub> ) & 1.15 (d, J = 6.8 Hz, 611), 2.26 (e, 3H), 3.08 (sept, J = 6.8 Hz, 1H), 4.94 (e, 1H), 5.20 (e, 2H), 6.88 (d, J = 1), 7.04-7.07 (m, 3H), 7.12-7.18 (m, 1H), 7.18 (e, 1H), 7.20 (d, J = 8.7 Hz, 2H), 7.32-7.51 (m, 5H)  3429, 1522, 1490, 1262, 1227, 1128, 1011, 833 cm <sup>-1</sup> 17 C
	1), 7.04-7.07 (m, 3H), 7.12-7.18 (m, 1H), 7.18 (s, 1H), 7.20 (d, J = 8.7 Hz, 2H), 7.32-7.51 (m, 5H) 3429, 1522, 1490, 1262, 1227, 1128, 1011, 833 cm <sup>-1</sup> 17 °C
IR (KBr) 34 mp 115-117	1429, 1522, 1490, 1262, 1227, 1128, 1011, 833 cm <sup>-1</sup> 17 °C
mp 115-117	17 °C
	- 1 1/10 1 1 1 1 0 0 1 1 1 1 1 1 1 1 1 1
TH NMR (C	14 NMR (CDCl3) 0 1.15 (d, J = 6.6 Hz, 6H), 1.77 (s, 3H), 1.82 (s, 3H), 2.27 (s, 3H), 3.08 (sept, J = 6.8 Hz, 1H), 4.64 (d, J =
I-1343 6.9 Hz, 2H),	1), 4.86 (s, 1H), 5.56 (t, J = 6.9 Hz, 1H), 6.89 (d, J = 8.6 Hz, 2H), 7.03 (t, J = 8.4 Hz, 1H), 7.05-7.19 (m, 3H), 7.19 (s,
1H), 7.21 (d,	(d, J = 8.6 Hz, 2H)
IR (KBr) 36	IR (KBr) 3524, 1611, 1523, 1489, 1260, 1228, 1200, 1128, 836 cm <sup>-1</sup>
mp 119-120	20 C
H NMR (C	14 NMR (CDCl <sub>3</sub> ) ô 1.15 (d, J = 6.9 Hz, 6H), 2.26 (s, 3H), 3.08 (sept, J = 6.8 Hz, 1H), 4.79 (d, J = 6.3 Hz, 2H), 4.85 (s, 1H),
1.1344   6.25 (t, J = 6	= 6.3 Hz, 1H), 6.89 (d, J = 8.7 Hz, 2H), 7.01 (t, J = 8.4 Hz, 1H), 7.07-7.12 (m, 2H), 7.15 (dd, J = 12.0, 2.1 Hz, 1H),
7.18 (s, 1H),	1), $7.20 (d, J = 8.7 Hz, 2H)$
IR (KBr) 34	IR (KBr) 3425, 1610, 1523, 1488, 1300, 1263, 1300, 1263, 1227, 1134, 1038, 896 cm <sup>-1</sup>
mp 109-110	
H NMR (CI	CDCl <sub>3</sub> ) 6 1.34 (d, J = 6.9 Hz, 3H), 2.24 (s, 3H), 4.00 (q, J = 6.9 Hz, 2H), 4.77-4.79 (m, 3H), 6.24 (t, J = 6.3 Hz,
1-134b 1H), 6.86-6.	1H), 6.86-6.90 (m, 2H), 6.98-7.19 (m, 4H), 7.47-7.50 (m, 2H)
IR (CHCl3) 3	) 3596, 2927, 1612, 1523, 1493, 1476, 1388, 1299, 1259, 1173, 1127, 1049, 886, 834 cm <sup>-1</sup>

Table 267

	mp 114-116 °C. II NMR (CDCh) & 1.33 (d, J = 6.9 Hz, 3H), 1.77 (s, 3H), 1.81 (e, 3H), 2.24 (e, 3H), 4.00 (q, J = 6.9 Hz, 2H), 4.63 (m, 2H),
9 	4.73 (br, 1H), 5.56 (m, 1H), 6.81 (s, 1H), 6.86-6.90 (m, 2H), 7.00-7.19 (m, 4H), 7.47-4.51 (m, 2H)  18 (CHCh) 3596 2929 2877 1610 1523 1493 1476 1386 1329 1316 1297 1261 1173 1125 1048 992 834 cm <sup>-1</sup>
	mp 144-146 °C
1.1347	<sup>1</sup> 11 NMR (CDCl <sub>3</sub> ) δ 3.20 (s, 311), 3.40 (s, 311), 3.75 (s, 311), 4.74 (s, 211), 5.19 (s, 2H), 6.44 (s, 1H), 7.05-7.62 (m, 12H) (H (KBr) 3437, 1614, 1679, 1620, 1488, 1465, 1453, 1436, 1414, 1393, 1364, 1346, 1299, 1270, 1235, 1198, 1175, 1149,
	1129, 1114, 1085, 1063 cm <sup>-1</sup>
	mp 156-159 °C
1 13/18	<sup>1</sup> H NMR (CDCl <sub>3</sub> ) δ 2.48 (s, 3H), 3.05 (s, 3H), 3.20 (s, 3H), 3.78 (s, 3H), 4.83 (s, 2H), 5.21 (s, 2H), 6.84 (s, 1H), 7.02-7.67 (m,
1-1340	12H)
	IR (KBr) 3430, 2940, 1607, 1522, 1481, 1452, 1419, 1389, 1365, 1294, 1273, 1230, 1200, 1176, 1151, 1132, 1080, 1011 cm.1
	mp 155-156 ℃
1.040	<sup>1</sup> HI NMR (CDCl <sub>3</sub> ) δ 1.15 (t, J = 6.9 Hz, 3H), 3.60 (q, J = 6.9 Hz, 2H), 3.75 (s, 3H), 3.90 (s, 3H), 4.93 (bs, 1H), 5.20 (s, 2H),
61.1	5.98 (s, 111), 6.46 (s, 111), 6.90-7.05 (m, 511), 7.26-7.56 (m, 7H)
	IR (KBr) 3409, 2938, 1613, 1522, 1438, 1416, 1396, 1382, 1360, 1268, 1232, 1211, 1169, 1131, 1113, 1078, 1022, 1006 cm <sup>-1</sup>
	mp 58-60 ზ
1,1350	1H NMR (DMSO-ds) & 1.71 (e, 6H), 2.21 (e, 3H), 2.22 (e, 3H), 3.71-3.76 (m, 2H), 6.11 (br e, 2H), 6.25-5.29 (m, 1H), 5.50-
0001.1	5.53 (m, 1H), 6.60-6.63 (m, 2H), 6.66-6.73 (m, 1H), 6.95-7.05 (m, 6H)
	IR (KBr) 3600-2800(br), 1623, 1527, 1492, 1454, 1428, 1331, 1269, 1267, 1184, 1116 cm <sup>-1</sup>

Table 268

	mp 140-142 C (dec.)
1.1351	Hz, 2H), 7.24-7.50 (m, 10H)
	IR (KBr) 3400, 1609, 1529, 1490, 1269, 1243, 1005, 807, 745 cm <sup>-1</sup>
	mp 114-116 ℃
	411 NMR (CDCh) 6 1.77 (8, 3H), 1.81 (8, 3H), 2.33 (8, 3H), 4.63 (4, J = 6.9 Hz, 2H), 4.89 (8, 1H), 5.54 (t, J = 6.9 Hz, 1H),
2011-1	6.89 (d, $J = 8.6 \text{ Hz}$ , 2H), 7.04 (t, $J = 8.6 \text{ Hz}$ , 1H), 7.23 (d, $J = 8.6 \text{ Hz}$ , 2H), 7.25-7.43 (m, 5H)
	IR (KBr) 3368, 1609, 1526, 1490, 1271, 1241, 1131, 991, 827, 811 cm <sup>-1</sup>
	mp 78-79 °C
1.1353	1.1353 H NMR (CDCI.) & 1.77 (s, 3H), 1.82 (s, 3H), 2.24 (s, 3H), 2.27 (s, 3H), 4.64 (d, J = 6.6 Hz, 2H), 5.51 · 5.59 (m, 1H), 6.98 ·
	7.20 (m, 7H), 7.28 · 7.36 (m, 2H)

Table 269

5		_																
10		Y	- CH2CH=CMe2	-(CH <sub>2</sub> ) <sub>2</sub> CH=CMe <sub>2</sub>	-CH2CH=CC12	-CH2C≡CMe	-CH2C6H4-4-Me	$-(CH_2)_2CH = CMe_2$	-CH2CH=CCl2	-CH2C≡CMe	-CH2C6H4-4-Me	-(CH2)2CH=CMe2	-CH2CH=CCl2	CH2C≡CMe	-CH2C6H4-4-Me	-(CH2)2CH=CMe2	- CH2CH=CCl2	- CH°C≡CMª
15		×	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	c
v		R13	ОМв	ОМв	OMs	OMs	OMs	СООН	НООЭ	соон	СООН	CH <sub>2</sub> OH	СН10Н	CH2OH	CH2OH	Ŗ	F	ĹŦ.
20		R12	Н	Н	Н	Н	Н	H	Н	Н	Н	Н	Н	Н	Н	Н	Н	H
		RII	Ξ	Ξ	H	Н	Ή	Ή	H	Н	Н	Н	Н	Н	Н	н	Н	Н
	€	RIO	=	Ξ	Н	Н	Н	Н	II	H	Н	Н	Н	Н	Н	Н	Н	Н
25		R 9	HO	OH	НО	ЮН	НО	НО	OII	НО	НО	ОН	НО	ЮН	ОН	ОН	НО	НО
30	, , , , , , , , , , , , , , , , , , ,	R 8	OMe	OMe	OMe	OMe	OMe	ОМе	OMe	OMe	ОМе	OMe	OMe	OMe	OMe	OMe	ОМе	OMe
	84 S.H.	R 7	OMe	OMe	OMe	ОМе	OMe	OMe	OMe	ОМе	OMe	ОМе	OMe	ОМе	OMe	OMe	ОМе	OMe
35		8 ≃	=	Ξ	Ξ	Ξ	Ξ	三	=	=	Ξ	Ξ	프	표	Н	Н	Н	H
	# T	2 ≥	크	프	三	Ξ	Ξ	Ξ	=	=	Ħ	Ξ	Ξ	Ŧ	H	H	Н	H
		~		티	Ξ	Ξ	H	프	=	=	Ħ	H	H	H	Н	Н	H	H
40		_ ≃	킈	크	王	Ξ	Ξ	Ξ	=		Ξ	三	Ξ	Ξ	Н	Н	Н	Н
		R2	크	王	田		王	三	=	=	Ξ	三	Ξ	三	H	H	H	H
45		۳ ا	HO	НО	HO	ЮН	НО	HO	HO	IIO	ОН	ОН	OH	НО	ОН	ЮН	НО	НО
50		No.	1.1354	1.1355	I-1356	1.1357	1.1358	1.1359	1.1360	1.1361	I-1362	1.1363	1.1364	1.1365	1.1366	I-1367	I-1368	I-1369

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A variable description				,	
or the company of the control of the company of the					

Table 271

	1	5
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1-1391	HO		Ξ	=		=	ОМе	OMe	CH2OH	Ξ	н	Η	по	0	$-(CH_2)_2CH = CMe_2$
1.1392	НО	Ξ	Ξ	Ξ	三	Ξ	OMe	OMe	СН2ОН	H	Н	Н	ЮН	0	-CH2CH=CCl2
1-1393	HO	=	Ξ	Ξ	Ξ	Ξ	OMe	OMe	СН2ОН	Ξ	H	Н	НО	0	- CH2C≡CMe
1.1394	ОН	Ξ	Ξ.	Ξ	표	Η	ОМе	OMe	СНДОН	Н	Н	Н	НО	0	-CH2C6H4-4-Me
1.1395	Ю	Ξ	Ξ	Н	Ξ	Ξ	OMe	ОМе	СН2ОН	H	Н	H	OMs	0	-CH2CH=CMe2
1.1396	OII	Ξ	=	=	Ξ	=	ОМе	OMe	СН₂ОН	H	Ξ	Ξ	OMs	၁	-(CH <sub>2</sub> ) <sub>2</sub> CH=CMe <sub>2</sub>
I-1397	IIO	Ξ	王	Ξ	王	Ξ	OMe	ОМе	СН2ОН	H	Н	H	OMs	0	-CH2CH=CCl2
1.1398	НО	三	Ξ	Ξ	프	Ξ	OMe	ОМе	СН2ОН	H	н	Н	OMs	0	- CH2C≡CMe
1.1399	НО	프	王	H	Ξ	Н	ОМе	OMe	СН2ОН	표	H	H	OMs	0	-CH2C6H4-4-Me
I-1400	НО	田	田	H	Ξ	H	OMe	ОМе	СН2ОН	H	H	H	соон	0	-CH2CH=CMe2
1.1401	НО	三	三	H	H	H	OMe	ОМе	CH <sub>2</sub> OH	H	Ħ	H	соон	0	$-(CH_2)_2CH=CMe_2$
1.1402	ЮН	Ξ	Ξ	Ξ	H	Н	OMe	OMe	CH <sub>2</sub> OH	H	Н	H	соон	0	-CH2CH=CCI2
I-1403	НО	프	H	Н	프	Н	ОМе	ОМе	CH <sub>2</sub> OH	Н	Н	Н	нооэ	0	-CH2C≡CMe
I-1404	НО	Ξ	H	Н	H	Н	ОМе	ОМе	СН2ОН	Н	Н	Н	нооэ	0	-CH2C6H4-4-Me
1.1405	НО	Ξ	Н	Н	Н	Н	OMe	ОМе	СН2ОН	Н	H	Н	Н0°НЭ	0	-CH2CH=CMe2
1.1406	ЮН	H	H	Н	H	H	OMe	ОМе	СН2ОН	Н	Н	Н	CH <sub>2</sub> OH	0	-CH2CH=CCl2
I-1407	НО	Ŧ	Н	Н	Н	н	OMe	ОМе	СН2ОН	Н	Н	Н	CH <sub>2</sub> OH	0	- CH2C≡CMe
I.1408	но	H	Н	Н	Н	Ή	ОМе	OMe	СН2ОН	Ξ	H	Н	СН2ОН	0	-CH2C6H4-4-Me
I-1409	ОН	H	Н	H	H	H	OMe	OMe	СН2ОН	Η	Н	H	ম	0	-CH2CH=CMe2
I-1410	ОН	H	Ξ	H	Ξ	田	OMe	ОМе	СН2ОН	H	H	H	Ŧ.	0	$-(CH_2)_2CH=CMe_2$
1.1411	Ю	H	H	H	H	Ξ	OMe	OMe	CH2OH	H	H	Н	Ē	0	-CH2CH=CCl2

'Table 272

	Me CH <sub>2</sub> OH II H H F O −CH <sub>2</sub> C≡CMe	4e CH <sub>2</sub> OH H H H F	de Me H H H OH O -CH2CH=CCl2	4e Me H H H OH O −CH2C≡CMe	Me Me H H II OM8 O -CH2CII=CMe2	Me H H OM8 O -(CH2)2CH=CMe2	de Me H H H OM8 O -CH2CH=CCl2	4e Me H H H OM8 O −CH2C≡CMe	de Me H H H OMB O -CH2CcH4-4-Me	Me Me H H H COOH O -CH2CH=CMe2	Me Me H H H COOH O -(CH3)2CH=CMe2	Me Me H H H COOH O -CH <sub>2</sub> CH=CCl <sub>2</sub>	Me Me H H H COOH O −CH <sub>2</sub> C≡CMe	Me Me H H H COOH OCH2C6H4-4-Me	Me Me H H H CH <sub>2</sub> OH OCH <sub>2</sub> CH=CMe <sub>2</sub>	Me Me H H CH2OH O -(CH2)2CH=CMe2	Me Me H H H CH2OH O -CH2CH=CCl2	Me Me H H H CH <sub>2</sub> OH O −CH <sub>2</sub> C≡CMe	Me Me H H H CH2OH O -CH2C6H4-4-Me	Me Me H H H H F O -CH2CH=CMe2	
	1e OMe	1e OMe	1e OMe	1e OMe	fe OMc	te OMe	1e OMe	1e OMe	1e OMe	fe OMe	fe OMe	1e OMe	1e OMe	1e OMe	1e OMe	fe OMe	1e OMe	de OMe	de OMe	1e OMe	OMe OMe
+	H OMe	H OMe	H OMe	H OMe	II OMe	II OMe	H OMe	H OMe	H OMe	н оме	н оме	H OMe	H OMe	н ОМе	H OMe	H OMe	H OMe	H OMe	н ОМе	н оме	מ
	H	I H	H	H	H	11	1. H	H	I H	H H	H H	H	1 H	1 H	1 H	1 H	H H	н	H H	н	:
-	II H	HH	H	H	H		H H	НН	H	н Н	н	н	н	н	н	н	НН	H	н	H	
-	Н	Ξ	=	=	=	=	=	H	н	Н	Н	н	H	Н	Н	Н	Н	Н	Н	Н	
	ШО	HO	HO	HO	НО	ПО	ПО	HO	НО	ОН	НО	НО	НО	НО	НО	ЮН	НО	НО	НО	НО	
	1.1412	1.1413	1.1414	1.1415	1.1416	1.1417	1.1418	1.1419	I.1420	1.1421	1.1422	1.1423	1-1424	1.1425	I.1426	1.1427	1.1428	1.1429	1.1430	1.1431	

Table 273

																			_	_
-CH2CH=CCl2	CH2C≡CMe	-CH <sub>2</sub> C <sub>6</sub> H <sub>4</sub> -4-Me	-CH2CH=CCl2	-CH2C≡CMe	-CH2C6H4-4-Me	-(CH2)2CH=CMe2	-CH2CH=CCl2	−CH2C≡CMe	-CH2C6H4-4-Me	-CH2CH=CMe2	-(CH <sub>2</sub> ) <sub>2</sub> CH=CMe <sub>2</sub>	-CH2CH=CCl2	-CH2C≡CMe	-CH2C6H4-4-Me	-CH2CH=CMe2	-(CH2)2CH=CMe2	-CH2CH=CCl2	-CH2C≡CMe	-CH2C6H4-4-Me	-(CH2)2CH=CMe2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ч	দ	Œ	НО	НО	НО	OMs	ОМв	OMs	OMs	НООО	СООН	СООН	соон	соон	CH <sub>2</sub> OH	СН2ОН	СН2ОН	СН2ОН	СН2ОН	F
Ħ	Ξ	Ξ	Ξ	H	H	H	Н	Н	Н	H	H	H	Н	Н	H	Н	Н	Н	Н	Н
H	H	王	H	H	H	Н	H	Н	Н	H	Н	Н	Н	Н	H	Н	H	Н	H	Н
H	Н	H	Н	Н	Н	Н	H	Н	н	Н	Н	H	Н	H	H	H	H	H	H	Ξ
Me	Me	Me	Н	Ξ	Н	Н	Н	Н	Н	Н	Н	Н	Н	H	Н	Н	Н	Н	Н	Н
OMe	ОМе	ОМе	ОМе	ОМе	OMe	ОМе	ОМе	ОМе	ОМе	OMe	OMe	ОМе	ОМе	ОМе	ОМе	ОМе	ОМе	ОМе	OMe	OMe
OMe	ОМе	ОМе	OMe	ОМе	ОМе	OMe	OMe	OMe	ОМе	OMe	ОМе	OMe	ОМе	ОМе	ОМе	OMe	ОМе	ОМе	ОМе	OMe OMe
н	H	Ξ	H	Н	П	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	H	Н	Н	Н
H	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	H	Н	H	Н	H	Н
H	Н	Н	Н	н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н
H	11	H	H	Н	П	Н	Н	Н	Н	Н	н	Н	Н	П	H	Н	Н	Н	Н	Н
H	Н	H	Н	Н	11	Н	Н	H	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н
110	но	ОН	ОН	OII	OH	ОН	ОН	ОН	ОН	ОН	OH	ОН	ОН	OH	OH	ОН	OH	ОН	ОН	НО
1-1433	1-1434	1.1435	I-1436	I.1437	1.1438	1.1439	I-1440	1.1441	1.1442	1.1443	I-1444	I-1445	I-1446	1.1447	1.1448	I.1449	1.1450	1.1451	I-1452	1.1453

Table 274

						=	-740	-MO	=	=	7	=	Ľ.	6	- CH,CH = CCI,
	OH	= :	=	= =	= =	= =	a Come		= =	= =	: =	: =	, G		– CH <sub>2</sub> C≡CMe
1-1455		= =	= =	= =	= =	=	S S	OMe	=	Ξ	H	: =	, E	0	-CH2C6H4-4-Me
1.1457	HO	=	Ŧ	=	=	: =	OMe	OMe	HO	H	Н	Н	ОН	0	- (CH <sub>2</sub> ) <sub>2</sub> CH=CMe <sub>2</sub>
1.1458	IIO	=	=	Ξ	Ξ	٤.	OMe	OMe	OH	11	Н	H	НО	0	-CH2CH=CCl2
697	IIO	=	=	Ξ	Ξ	~	OMe	OMe	110	Ξ	=	H	110	0	-CH2C≡CMe
1-1460	IIO	Ξ	=	Ξ	H	Ŀ	OMe	UMe	НО	Н	Н	H	НО	0	-CH2C6H4-4-Me
1-1461	НО	H	Ξ	н	Н	H.	ОМе	ОМе	НО	Н	Н	H	ОМв	0	-CH2CH=CMe2
1.1462	НО	H	H	Н	Н	F	ОМе	ОМе	ЮН	H	Н	H	OMs	0	- (CH <sub>2</sub> ) <sub>2</sub> CH=CMe <sub>2</sub>
I-1463	OHI	H	H	Н	н	F	OMe	ОМе	НО	H	H	H	ОМв	0	-CH2CH =CCl2
I-1464	НО	Н	н	Н	Н	F	ОМе	0Me	НО	Н	Н	H	ОМв	0	-CH2C≡CMe
1.1465	НО	н	Н	Н	Н	F	ОМе	ОМе	НО	H	H	H	ОМв	0	-CH2C6H4-4-Me
1-1466	IIO	H	Ξ	Н	Н	ત	ОМе	ОМе	ЮН	Н	Н	H	СООН	0	CH2CH=CMe2
1-1467	IIO	=	=	=	Ξ	રા	ОМе	ОМе	НО	Н	Н	H	нооэ	0	-(CH2)2CH = CMe2
1-1468	НО	Н	н	Н	Н	A	OMe	ОМе	ОН	Н	Н	H	соон	0	-CH2CH=CCl2
1.1469	ЮН	H	н	Н	Н	F	ОМе	ОМе	ЮН	H	H	H	СООН	0	CH2C≡CMe
1.1470	IIO	Ξ	Ξ	11	Н	F	ОМе	OMe	HO	Ξ	H	H	COOH	0	-CH2CaH4-4-Me
1.1471	OII	Ξ	11	H	П	F	ОМе	ОМе	ОН	H	H	H	СН2ОН	0	CH2CH=CMe2
1.1472	ЮН	н	H	Н	Н	F	ОМе	ОМе	НО	Н	Н	Ħ	СН2ОН	0	(CH <sub>2</sub> ) <sub>2</sub> CH=CMe <sub>2</sub>
I.1473	НО	Н	Н	Н	H	伍	OMe	ОМе	HO	H	H	Ή	СН2ОН	0	-CH2CH=CCl2
1.1474	ЮН	Н	Н	Н	Н	Œ,	OMe	ОМе	ОН	H	H	H	СН2ОН	0	-CH2C≡CMe

Table 275

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1	7				,	_	_	_	_											
-CH2C6H4-4-Me	-CH2CH=CMe2	-(CH2)2CH = CMe2	-CH2CH=CCl2	-CH2C≡CMe	-CH2C6H4-4-Me	-CH2CH=CMe2	-(CH2)2CH=CMe2	- CH2CH=CCl2	-CH2C≡CMe	-CH2C6H4-4-Me	-CH2CH=CMe2	- (CH2)3CH=CMe2	-CH2CH=CCl2	-CH2C≡CMe	-CH2C6H4-4-Me	-CH2CH=CMe2	-(CH2)2CH = CMe2	-CH2CH=CCl2	CH2C≡CMe	-CHoCoHo-4-Mo
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
СН2ОН	F	댼	Ą	F	다	ЮН	НО	ОН	ОН	ОН	ОМв	OMe	OMs	OMs	OMe	соон	соон	СООН	соон	HOOD
Ħ	Ξ	Н	H	Н	Н	Н	Н	Н	Н	H	H	Н	Н	H	H	H	H	Н	Н	Ħ
E	H	Н	H	Н	Н	Н	Н	Н	Н	Н	H	Н	Н	Ξ	Ħ	Ħ	H	Н	Н	Н
E	Ξ	Н	H	Н	H	Н	Η	Н	H	Н	Н	Η	H	H	Н	H	H	H	H	π
HO	НО	ОН	ЮН	НО	НО	ЮН	OH	НО	ЮН	НО	ОН	ОН	ОН	НО	ОН	ОН	НО	. ОН	ОН	НО
OMe	OMe	OMe	OMe	ОМе	ОМе	ОМе	OMe	ОМе	ОМе	OMe	ОМе	OMe	ОМе	ОМе	OMe	ОМе	ОМе	OMe	OMe	OM O
OMe	ОМе	OMe	OMe	OMe	OMe	OMe	ОМе	ОМе	OMe	ОМе	ОМе	ОМе	ОМе	ОМе	ОМе	OMe	OMe	ОМе	OMe	OMe
<u>-</u>	٤.	<u>-</u>	-	<u></u>	~	H	Ξ	Н	H	H	Н	H	H	H	Ξ	H	Ξ	н	H	Ή
н	Ξ	王	=	Ξ	=	H	Ξ.	Н	Н	Н	H	표	H	H	=	H	Ή	H	F	, <b> H</b>
н	Ħ	Ξ	Ξ	H	Ξ	Ξ	=	H	H	H	H	Н	H	H	=	H	田	Ξ	H	H
H	Ξ	Ξ	Ξ	H	Ξ	Ξ	Ξ	Ξ	H	三	=	=	H	Ξ	=	H	H	Ξ	Ξ	H
H	=	三	Ξ	=	=	Ξ	Ξ	H	H	H	=	н	H	Ξ	Ξ	H	H	Ħ	田	Ή
НО	HO	НО	Ю	IHO	IIO	OMs	OMs	OMs	OMs	ОМв	OMB	OMs	OMs	OMs	OMs	ОМв	OMs	OMs	OMs	OMs
1.1475	1-1476	1.1477	1.1478	1.1479	1.1480	1.1481	1.1482	1.1483	I-1484	I-1485	1.1486	1.1487	I-1488	I.1489	1.1490	I.1491	I-1492	I-1493	1.1494	I-1495

Table 276

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1.1497     ОМв       1.1498     ОМв       1.1499     ОМв       1.1500     ОМв       1.1502     ОМв       1.1503     ОМв       1.1503     ОМв       1.154     ОМв	:	Ξ	H	Ξ	Ξ	ОМе	ОМе	OH	Н	Н	H	СН2ОН	0	-CH2CH=CMe2
	=	=	=	=	=	OMe	ОМе	ОН	Ξ	Ξ	Н	СН2ОН	0	- (CH <sub>2</sub> ) <sub>2</sub> CH=CMe <sub>2</sub>
	=	=	Ξ	=	Ξ	ОМе	ОМе	ЮН	Ξ	H	Ξ	СН2ОН	0	- CH2CH=CCl2
	Ξ	===	=	Ξ	Н	OMe	ОМе	011	H	H	H	СН2ОН	0	– CH2C≡CMe
	Ξ	=	Ξ	Н	II	ОМе	OMe	OH	Ξ	Н	H	СН2ОН	0	-CH2CaH4-4-Me
	Ξ	=	=	Ξ	н	OMe	ОМе	011	Ξ	Ξ	H	٤	0	-CH2CH=CMe2
	Ξ	=	Ξ	Ξ	Ξ	OMe	ОМе	OH	Ξ	H	Ξ	Œ	0	-(CH <sub>2</sub> ) <sub>2</sub> CH=CMe <sub>2</sub>
	Ξ	Ξ	Ξ	Ξ	H	ОМе	OMe	НО	표	H	H	F	0	-CH2CH=CCI3
1	Ξ	Ξ	Ħ	Н	Н	ОМе	OMe	ОН	Н	Н	H	Ľ.	0	-CH2C≡CMe
1.1505 OMs	Ξ	Ξ	Ξ	H	H	ОМе	ОМе	ЮН	Ξ	Ή	Η	F	0	-CH2C6H4-4-Me
	Н	Н	Н	Н	H	ОМе	ОМе	СООН	Ξ	Ξ	H	НО	0	-CH2CH=CMe2
	н	11	Н	Н	Н	ОМе	OMe	COOH	H	Ξ	H	НО	0	-(CH <sub>2</sub> ) <sub>2</sub> CH=CMe <sub>2</sub>
	H	Ħ	н	Н	Н	OMe	OMe	соон	Н	H	Ξ	НО	0	-CH2CH=CCl2
_	Ξ	H	H	Ħ	H	ОМе	OMe	соон	Н	H	H	но	0	CH2C≡CMe
_	Ξ	Ξ	Ξ	H	Н	ОМе	OMe	COOH	H	Ξ	H	ОН	0	-CH2CeH4-4-Me
_	Ŧ	Ξ	H	H	Ξ	ОМе	OMe	соон	H	H	H	ОМв	0	-CH2CH=CMe2
	Ξ	H	Н	H	Н	ОМе	ОМе	соон	H	Ξ	Ξ	ОМв	0	-(CH2)2CH=CMe2
	Ξ	Н	H	H	Н	ОМе	ОМе	соон	H	Ξ	Ξ	OMs	0	-CH2CH=CCl2
	Ξ	Ξ	Н	Н	Н	ОМе	OMe	СООН	王	H	Ξ	OMs	0	-CH2C≡CMe
	Н	Н	Н	н	Ξ	ОМе	OMe	000	프	三	픠	OMs	0	-CH2C6H4-4-Me
I-1516 OMs	Н	Н	Н	Ή	Ή	OMe	OMe	СООН	H	H	三	СООН	0	-CH2CH=CMe2

Table 277

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22			ø	П	~	Г		80						-						_
-(CH <sub>2</sub> ) <sub>2</sub> CH=CMe <sub>2</sub>	-CH2CH=CCl2	-CH₂C≡CMe	-CH2C6H4-4-Me	-CH2CH=CMe2	- (CH2)2CH=CMe2	-CH2CH=CCl2	-CH2C≡CMe	-CH2C6H4-4-Me	-CH2CH=CMe2	-(CH2)2CH=CMe2	-CH2CH=CCl2	-CH2C≡CMe	-CH2C6H4-4-Me	$-(\mathrm{CH}_2)_2\mathrm{CH} = \mathrm{CMe}_2$	-CH2CH=CCl2	-CH₂C≡CMe	-CH2C6H4-4-Me	$-(CH_2)_2CH = CMe_2$	"LON=HOTHO —	240-040-
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	~
СООН	COOH	соон	соон	СН2ОН	НО⁵НЭ	СН2ОН	СН2ОН	СН2ОН	ম	뚀	Я	F	F	ОН	ОН	ОН	ОН	OMs	OMB	7
Н	Н	Н	H	Н	Н	Н	Н	Н	H	H	Н	Н	Н	Н	Н	Н	Н	Н	Н	7
Н	н	Н	Н	Н	н	Ή	H	H	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	п
H	H	Ξ	Н	Н	Ξ	H	Ξ	H	H	Н	Н	Н	H	Н	H	H	Н	Н	Н	7
СООН	СООН	СООН	соон	нооо	СООН	СООН	СООН	СООН	С00Н	СООН	СООН	соон	СООН	СН2ОН	СН2ОН	СН2ОН	СН2ОН	СН2ОН	СН2ОН	CHOH
OMe	OMe	OMe	OMe	ОМе	OMe	OMe	OMe	ОМе	ОМе	OMe	ОМе	ОМе	OMe	OMe	OMe	OMe	OMe	OMe	OMe	OMe
OMe	OMe	OMe	ОМе	ОМе	OMe	ОМе	OMe	ОМе	ОМе	ОМе	0Me	ОМе	ОМе	OMe	OMe	OMe	OMe	OMe	OMe	OMe
Ξ		Ξ	Ξ	Ξ	=	Ξ	Ξ	王	Ξ	H	H	H	Ξ	Ξ	Ξ	H	H	H	Н	Ή
H	Ξ	Ξ	Ξ	Ξ	=	Ξ	Ξ	Ξ	Ξ	H	H	Н	Н	Н	H	H	Ħ	H	H	Ξ
	=		=	Ξ	=	Ξ	프	Н	Ξ	Ħ	H	H	Н	Н	H	H	Ξ	H	H	Ξ
	=	크	Ξ	Ξ	Ξ	=	크		Ξ	Ξ	H	H	H	Н	Ξ	Ξ	Н	Ξ	Ή	Ξ
三	=	Ξ	三	=	=	픠	н	三	三	H	Ξ	Ξ	Н	H	Н	H	Н	H	Н	Ξ
OMs	OMs	OMs	OMs	ОМв	OMs	OMs	OMs	OMs	OMs	OMs	OMs	ОМв	ОМв	OMs	ОМв	ОМв	OMs	OMs	OMs	OMs
1.1517	1.1518	1-1519	I-1520	I-1521	1.1522	1.1523	I-1524	I-1525	1.1526	1.1527	I-1528	I-1529	1-1530	I-1531	I-1532	1-1533	I-1534	1.1535	I.1536	1.1537

Table 278

1.1538	OMs	Ξ	Ξ	H	Н	=	OMe	ОМе	CHZOH	듸	픠	Н	ОМв	0	-CH <sub>2</sub> C <sub>6</sub> H <sub>4</sub> -4-Me
I. 1539	ОМя	Ξ	Ξ	Ξ	=	=	OMe	OMe	CH2OH	三	크	Η	СООН	0	-CH2CH=CMe2
1.1540	OMs	Н	Н	Н	Н	Ξ	ОМе	ОМе	CII2OH	Ξ	三	프	СООН	0	-(CH2)2CH=CMe2
1-1541	OMs	н	11	Н	H	Ξ	OMe	OMe	СН2ОН	Ξ	Ξ	н	соон	0	-CH2CH=CCl2
1.1542	OMs	Н	Н	Н	н	н	ОМе	OMe	CH2OH	Ξ	Ξ	H	СООН	0	-CH2C≅CMe
1.1543	OMB	11	=	П	11	=	OMe	OMe	C112011	=	=	==	СООН	0	-CH2C6H4-4-Me
I-1544	OMs	Н	H	Н	Н	Н	OMe	ОМе	СН2ОН	Ξ	Ξ	Н	СН2ОН	0	-(CH <sub>2</sub> ) <sub>2</sub> CH=CMe <sub>2</sub>
I.1545	OMs	H	Н	Н	Н	Н	ОМе	OMe	СН2ОН	Ħ	H	Н	СН2ОН	0	-CH2CH=CCl2
[-1546	OMs	Н	Н	Н	Н	Н	ОМе	ОМе	СН2ОН	Ħ	Ξ	Н	СН2ОН	0	– CH₂C≡CMe
1.1547	OMs	Н	Н	Н	Н	H	ОМе	ОМе	СН20Н	Ξ	=	H	СН2ОН	0	-CH <sub>2</sub> C <sub>6</sub> H <sub>4</sub> -4-Me
I.1548	OMs	Н	Н	Н	Н	H	ОМе	ОМе	СН2ОН	H	Ξ	Н	स	0	−CH2CH=CMe2
I-1549	OMB	Н	Н	Н	Н	Ξ	OMe	OMe	СН2ОН	Ξ	Ξ	H	F	0	$-(CH_2)_2CH = CMe_2$
1-1550	ОМв	н	Н	Н	H	Ξ	OMe	ОМе	CH <sub>2</sub> OH	Ξ	H	H	F	0	-CH2CH=CCl2
1-1551	OMs	Н	Н	н	Н	Н	ОМе	ОМе	СН2ОН	Н	H	Н	ᅜ	0	– CH <sub>2</sub> C≡CMe
I-1652	OMs	Н	Н	Н	Н	H	ОМе	OMe	СН2ОН	Ξ	Ξ	H	Έι	0	-CH2C6H4-4-Me
1-1553	UMs	н	Н	H	Ξ	Ξ	OMe	OMe	Me	H	Ξ	Ξ	НО	0	-CH2CH=CMe2
1-1554	OMs	Н	Н	Н	н	H	ОМе	OMe	Me	Ξ	H	H	НО	0	-(CH2)2CH=CMe2
I-1555	OMB	Н	Н	Н	H	H	ОМе	OMe	Me	H	Ħ	H	НО	0	-CH2CH=CCl2
I-1556	OMs	Н	Н	H	H	H	OMe	ОМе	Me	H	Ξ	Ħ	НО	0	-CH₂C≡CMe
1.1657	OMs	н	Н	H	Ħ	H	OMe	OMe	Me	Ξ	王	Ή	НО	0	-CH2C6H4-4-Me
I.1558	OMs	Н	Н	Н	Н	Н	ОМе	ОМе	Me	Н	Ή	H	OMs	0	-CH2CH=CMe2

Table 279

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	$\overline{}$	_	_		_						_					·				
-CH <sub>2</sub> CH =CCl <sub>2</sub>	-CH <sub>2</sub> C≡CMe	-CH2CH=CMe2	-(CH <sub>2</sub> ) <sub>2</sub> CH = CMe <sub>2</sub>	-CH2CH=CCl2	-CH2C≡CMe	-CH2C6H4-4-Me	-CH2CH=CMe2	-(CH2)2CH = CMe2	- CH2CH=CCl2	– CH₂C≡CMe	-CH2C6H4-4-Me	-CH2CH=CMe2	$-(CH_2)_2CH = CMe_2$	-CH2CH=CCI2	-CH2C≡CMe	-CH2C6H4-4-Me	-CH2CH=CMe2	- (CH2)2CH=CMe2	- CH2CH=CCl2	-CH°C≡CMa
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	c
OMs	OMs	СООН	СООН	СООН	Н000	СООН	CH <sub>2</sub> OH	CH <sub>2</sub> OH	СН2ОН	нойно	CH <sub>2</sub> OH	H	ų	Ą	Œ.	F	НО	НО	НО	НО
H	H	H	Н	Н	Ξ	Н	H	н	H	H	Н	Н	Н	Н	Н	Н	Н	Н	Н	Ħ
Ξ	н	Ξ	Н	Ξ	Ξ	н	Н	Н	Н	Ξ	H	Н	H	Н	H	Н	Н	Н	Н	Н
H	Ξ	Ξ	H	Н	н	H	Н	H	Н	Н	Н	Н	H	Н	Н	Н	Н	Н	Н	H
Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Н	Н	Н	Н
OMe	OMe	ОМе	OMe	ОМе	ОМе	ОМе	ОМе	ОМе	OMe	ОМе	ОМе	ОМе	ОМе	ОМе	OMe	OMe	OMe	OMe	OMe	OMe
ОМе	OMe	ОМе	OMe	ОМе	ОМе	ОМе	OMe	ОМе	ОМе	ОМе	OMe	OMe	OMe	OMe	OMe	ОМе	OMe	OMe	OMe	OMe
	=	=	Ξ	Ξ	=	Н	Н	H	H	Ξ	H	Ξ	=	H	Ξ	Ξ	Ξ	Ξ	Ξ	H
=	Ξ	=	Ξ	Ξ	Η	Ξ	H	H	Ξ	Ξ	Ξ	H	=	Ξ	H	H	Ħ	H	Ή	/ <b>H</b>
=	=	=	Ξ	H	11	Ξ	Ξ	H	Ξ	Ξ	=	Ξ	Ħ	H	H	H	Ξ	Ξ	H	H
=	Ξ	=	Ξ	Ξ	=	=	王	H	=	=	Ξ	Ξ	=	Ξ	Ξ	H	Ξ	王	Ξ	H
	Ξ	=	Ξ	=	н	Η	H	Ξ	Ξ	=	三	H	Ξ	H	H	H	王	H	三	Н
OMs	OMs	OMs	OMs	ОМв	ОМв	OMs	OMs	OMs	OMs	OMs	OMs	OMs	OMs	OMs	ОМв	OMs	OMs	OMs	OMs	OMe
1.1559	1.1560	1.1561	1.1562	1.1563	1.1564	1.1565	1.1566	1.1567	1.1568	1.1569	1.1570	I-1571	1.1572	1.1573	I-1574	I-1575	1.1576	1.1577	1.1578	I-1579

Table 280

		H H H H H OMe OMe H H H H OH O -CH2C6H4-4-Me	II II H H H II OMe OMe H H H H OMs OCH2CH=CCl2	H II H II H OMe OMe II II H II OMB OCH2C≡CMe	H H H H OMe OMe H H H H COOH O -CH2CH=CMe2	H H H H II OMe OMe II II H H COOH O -(CH2)2CH=CMe2	11 11 11 11 11 0Me OMe 11 11 11 H COOH O -CH2CH=CC12	H H H H OMe OMe H H H COOH O −CH2C≡CMe	H H H H H OME OME H H H H COOH O -CH2CeH4-4-Me	H H H H H OME OME H H H H CH2OH O -CH2CH=CMe2	H H H H OMe OMe H H H CH2OH O -(CH2)2CH=CMe2	H H H H H OME OME H H H H CH2OH O -CH2CH=CCl2	H H H H H OME OME H H H H CH2OH O -CH2C=CME	H H H H H OME OME H H H H CH2OH O -CH2C6H4-4-Me	11 11 11 11 0Me OMe 11 11 H H F O -(CH2)2CH=CMe2	H H H H H OMe OMe H H H H F O -CH2CH=CCl2	H H H H OME OME H H H H F O -CH2C=CME	H H H H F OME OME OH H H H OH O -CH <sub>2</sub> CH=CMe <sub>2</sub>	H H H H F OME OME OH H H H OH O -(CH2)2CH=CMe2	H H H H F OME OME OH H H H OH O -CH2CH=CCl2	7
<del></del>	-	王	H	Ξ	н	н	-	Ĥ	н	Н	н	н	Н	н	11	н	Н	н	Н	н	н н н
OMS		8	æ	8	B H	œ	20	8	62	8	<b>.</b>	20	8	8	8	8	60	80	8	60	ОМв Н

Table 281

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	_	_	_	_	_															
-CH2CH=CMe2	-(CH2)2CH=CMe2	-CH2CH=CC12	-CH2C≡CMe	-CH2CaH4-4-Me	-CH2CH=CMe,	-(CH2)2CH=CMe2	-CH2CH=CCl2	-CH2C≡CMe	-CH2C6H4-4-Me	-CH2CH=CMe2	-(CH <sub>2</sub> ) <sub>2</sub> CH=CMe <sub>2</sub>	-CH2CH=CCl2	- CH2C≡CMe	-CH2C6H4-4-Me	-CH,CH=CMe,	-(CH <sub>9</sub> ) <sub>2</sub> CH=CM <sub>6</sub>	-CH,CH=CCI,	-CH <sub>2</sub> C≡CM <sub>8</sub>	-CH2CgH4-4-Mg	-CH2CH=CCl2
0	0	0	0	0	) >	0	0	0	0	0	0	0	0	0	0	c	0	0	0	0
OMs	OMs	ОМв	OMs	OMe	COOH	СООН	СООН	СООН	СООН	СН2ОН	СН2ОН	СН2ОН	СН2ОН	СН2ОН	Œ	(z	<u> </u>	[E.	ſ£,	НО
Ξ	王	Ξ	Ξ	Ξ	=	H	Н	Н	H	Н	Н	Н	Ħ	Н	H	Œ	=	H	H	H
=	H	Н	Ħ	Ξ	=	H	H	Н	Н	Н	Н	Н	Н	Н	H	Ξ	E	H	H	H
=	Н	н	Н	=	=	Н	Н	H	Н	Н	Н	Н	Н	Н	H	Ξ	H	Ξ	H	H
HO	но	ОН	OH	ЮН	OH	ЮН	НО	ОН	ОН	ОН	ОН	ОН	ОН	ОН	НО	ЮН	НО	НО	НО	НО
OMe	ОМе	ОМе	OMe	OMe	OMe	ОМе	ОМе	OMe	OMe	ОМе	ОМе	ОМе	OMe	ОМе	OMe	OMe	ОМе	ОМе	OMe	ОМе
OMe	OMe	OMe	OMe	OMe	OMe	OMe	OMe	ОМе	OMe	ОМе	ОМе	ОМе	OMe	OMe	ОМе	ОМе	ОМе	ОМе	OMe	ОМе
<u></u>	-	-	-	-	=	2	2	5-	<u>د</u> ,	Œ,	-	5	Œ,	Ŀ	G	Ŀ	Ή	[z.,	Ŀ	H
	=	Ξ	=	=	=	Ŧ	Ξ	H	H	H	=	H	H	H	H	Н	Н	Ξ	Ξ	H
	=	=	Ξ	=	=	=	H	=	H	Ξ	=	Ξ	王	H	H	Н	H	王	Ξ	н
		=	=	Ξ	=	Ħ	=	=	=	=	=	=	Ξ	Ξ	Ξ	Ξ	H	Ξ	王	H
	=	=	크	=	=	=	H	=	Ξ	王	=	=	三	H	H	포	Ξ	H	H	H
OMs	OMs	OMs	OMs	OMs	ОМв	OMs	OMs	OMs	OMs	OMs	OMs	OMs	OMs	OMs	OMs	OMs	OMs	OMs	OMs	Œ
1.1601	1.1602	1.1603	1.1604	I.1605	1.1606	1.1607	1.1608	1.1609	1.1610	1.1611	1.1612	1.1613	1.1614	1.1615	J-1616	1.1617	I-1618	I.1619	1.1620	1.1621

Table 282

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·																				
– CH₂C≡CMe	-CH2CH=CCl2	-CH2C≡CMe	-CH2CH=CMe2	-(CH <sub>2</sub> ) <sub>2</sub> CH=CMe <sub>2</sub>	-CH2CH=CCh	- CH2C≡CMe	-CH2C8H4-4-Me	-CH2CH=CMe2	-(CH2)2CH=CMe2	-CH2CH=CCl2	-CH₂C≡CMe	-CH2C6H4-4-Me	-CH2CH=CCl2	– CH₂C≅CMe	-CH1CH=CCl2	- CH2C≡CMe	-CH2CH=CMe2	-(CH2)2CH=CMe2	- CH2CH=CCl2	– CH₂C≕CMe
0	0	0	0	0	Э	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
НО	ОМв	ОМв	соон	СООН	C0011	СООН	СООН	СН2ОН	СН2ОН	СН2ОН	СН2ОН	СН2ОН	Ľ,	ম	ОН	ЮН	ОМв	ОМв	ОМв	OMe
Н	Ħ	Н	·Ħ	H	=	Ξ	H	Н	H	H	H	H	H	H	H	H	H	H	H	H
H	H	H	H	H	=	Ξ	H	H	H	Ξ	Η	Н	H	H	H	H	Н	H	H	H
Ξ	Ξ	Ξ	Ξ	=	=	=	Ξ	Ξ	H	H	Ξ	Ξ	Ξ	Ξ	Ξ	Ξ	Ή	Ħ	Ξ	H
НО	110	ОН	ЮН	ПО	110	НО	ОН	ЮН	ОН	ОН	НО	НО	ОН	ОН	соон	ноор	С00Н	соон	СООН	соон
OMe	OMe	OMe	OMe	OMe	OMe	ОМе	OMe	ОМе	OMe	OMe	OMe	ОМе	ОМе	OMe	ОМе	ОМе	ОМе	OMe	OMe	ОМе
OMe	ОМе	ОМе	ОМе	OMe	OMe	OMe	OMe	ОМе	OMe	ОМе	OMe	ОМе	OMe	OMe	ОМе	OMe	OMe	ОМе	ОМе	OMe
Ξ	11	Н	Н	=	=	Н	Н	П	Н	Н	Н	Н	Н	Н	Н	H	H	Н	Η	H
H	11	Н	Н	=	Ξ	Н	Н	11	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	H	Н
H	Н	Н	Н	Ξ	=	Н	Н	Η	Н	Н	н	Н	Н	Н	Н	Н	Н	Н	Н	Н
Ħ	H	Ξ	Н	Н	=	Н	Н	Ξ	H	Н	н	н	Н	Н	Н	Н	Н	Н	Н	Н
Ξ	II	Н	Н	11	=	H	Н	11	H	Н	11	H	Н	Н	Н	Н	Н	Н	Н	Н
Ŀ	노	F	R	ų	<i>.</i> 4	F	P	F	Ē.	ম	F	F	F	٤	F	F	P	F	F	F
1.1622	1-1623	1.1624	1-1625	1-1626	1.1627	1.1628	1-1629	1.1630	1.1631	I-1632	1.1633	1.1634	1.1635	1.1636	1.1637	1.1638	1-1639	1.1640	1.1641	1-1642

Table 283

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	_																			
-CH2C6H4-4-Me	-CH2CH=CMe2	$-(CH_2)_2CH = CMe_2$	-CH2CH=CCl2	- CH2C≡CMe	-CH2C6H4-4-Me	-CH2CH=CMe2	-(CH2)2CH=CMe2	-CH2CH=CCl2	-CH2C≡CMe	-CH2C6H4-4-Me	-CH2CH=CCl2	– CH₂C≡CMe	-CH2CH=CMe2	-(CH2)2CH=CMe2	-CH2CH=CCl2	– CH₂C≡CMe	-CH <sub>2</sub> C <sub>6</sub> H <sub>4</sub> -4-Me	-CH2CH=CMe2	-(CH2)2CH = CMe2	-CH2CH=CCl2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OMs	СООН	соон	СООН	СООН	СООН	СН2ОН	СН2ОН	СН₂ОН	СН1ОН	СН2ОН	F	F	ОН	НО	НО	ОН	ЮН	OMs	ОМв	ОМв
H	H	Ξ	Έ.	Н	H	Н	Н	H	H	Н	Н	Н	Н	н	Н	Н	Н	Η	Н	H
Ξ	H	Ξ	H	H	H	H	H	H	Н	Н	Н	Н	H	H	Н	Н	Н	H	Н	H
Ξ	Н	Н	H	н	Ξ	Н	H	H	Η	Н	Н	Н	H	田	H	H	프	H	Н	H
СООН	COOII	СООН	соон	СООН	COOH	нооэ	СООН	соон	СООН	соон	СООН	соон	OMe CH2OH	СН2ОН	СН2ОН	СН2ОН	СН2ОН	СН2ОН	СН2ОН	СН2ОН
OMe	OMe	ОМе	ОМе	ОМе	ОМе	ОМе	ОМе	ОМе	ОМе	ОМе	ОМе	ОМе		OMe	OMe	ОМе	OMe	OMe	ОМе	OMe OMe
OMe	ОМе	OMe	OMe	ОМе	OMe	OMe	OMe	OMe	ОМе	ОМе	ОМе	ОМе	ОМе	OMe	OMe	OMe	OMe	OMe	OMe	OMe
=	=	=	Ħ	Ξ	=	Н	H	Н	H	Н	Н	Н	Н	Ξ	H	Н	H	H	Н	H
Ξ	Н	Н	Н	Н	=	Н	H	H	H	Н	Н	Н	H	H	H	H	Ξ	H	H	H
Ξ	Н	Ξ	H	H	11	H	H	Ξ	Η	H	Н	H	Н	王	H	Н	Ξ	Ή	Н	H
=	Ξ	Ξ	H	=	=	Н	Ξ	H	Ξ	Н	н	=	Ξ	王	Ξ	H	Ξ	Ή	Н	H
=	Ξ	=	Ξ	Ξ	=	H	표	Н	Ξ	Н	=	Ξ	Ξ	三	王	H	Ξ	Ξ	H	H
2	ા	ા	સ	ય	-1	Ē	۲.	ĹŁ,	Ŀ	F	ম	F	Ŀ	ŗ,	Œ.	Į.	Ľ,	ᄕ	뚀	(E.
1.1643	1.1644	1.1645	1-1646	1.1647	1-1648	1.1649	1-1650	1.1651	1.1652	I-1653	1.1654	1.1655	J.1656	1-1657	I-1658	I-1659	I-1660	1.1661	I-1662	I.1663

Table 284

1-1664	7.	=	=		Ξ	=	OMe		OMe CH2OH		프	Ξ	OMs	0	—CH2C≡CMe
1.1665		=	=	=	H	=	OMe	OMe	СИ2ОН	=	Ξ	H	ОМв	0	-CH2C6H4-4-Me
1.1666	Έ	=	Ξ	=	=	=	OMe	ОМе	CILOH	Ξ	=	Н	СООН	0	-CH2CH=CMe2
1.1667	21	=	-	Ξ	Н	Н	OMe	OMe	СН2ОН	Ξ	H	Н	соон	0	-(CH2)2CH=CMe2
1.1668	Œ,	Ξ	=	Η	Ξ	=	OMe		OMe CH2OH	Ξ	H	Ξ	СООН	0	-CH2CH=CCl2
1.1669	Έ.	=	=	==	=	=	ОМе	OMe	CHOH	Н	Н	Н	СООН	0	CH2C≡CMe
1-1670	ᄄ	=	Ξ	H	H	Ξ	OMe	OMe	СН2ОН	H	Н	Н	COOH	0	-CH2C6H4-4-Me
1.1671	Œ	Ξ	Ξ	Н	H	Н	OMe	OMe	СН2ОН	Н	Н	Н	СН2ОН	0	-CH2CH=CMe2
1.1672	Œ	H	Ξ	Н	H	Ξ	ОМе	OMe	СН2ОН	Н	Н	Н	СН2ОН	0	-(CH2)2CH=CMe2
1.1673	Ŀ	H	Ξ	Н	Н	H	OMe	ОМе	СН2ОН	H	Н	Н	СН2ОН	0	-CH2CH=CCl2
I.1674	Œ,	Ξ	Н	Н	H	Н	ОМе	OMe	СН2ОН	Н	Н	Н	СН2ОН	0	- CH <sub>2</sub> C≡CMe
1.1675	ন	H	Ξ	H	H	Η	ОМе	OMe	CIIzOH	Н	Н	н	СН2ОН	σ	-CH2C6H4-4-Me
1.1676	ય	Ξ	H	Н	Н	Ξ	ОМе	OMe	СН2ОН	Н	н	Н	Ŀ	0	-CH2CH=CMe2
1.1677	Ŀ	Н	Н	H	Н	H	OMe	OMe	СН2ОН	Η	Н	H	Œ.	0	-(CH2)2CH = CMe2
I-1678	ĈE,	н	Ξ	H	H	H	ОМе	ОМе	СН2ОН	Η	H	H	Œ,	0	- CH <sub>2</sub> CH=CCl <sub>2</sub>
1.1679	٤.	=	Ξ	Н	H	Ξ	OMe	ОМе	СН2ОН	H	Н	H	F	0	- CH₂C≡CMe
I-1680	Œ,	H	Ξ	H	H	H	OMe	ОМе	СН2ОН	H	H	H	स	0	-CH2C6H4-4-Me
I.1681	F.	H	H	H	H	Ξ	OMe	OMe	Me	H	H	Ξ	ОН	0	-CH2CH=CMe2
1.1682	F	Ξ	H	Н	H	Ξ	OMe	OMe	Me	H	H	Ξ	НО	0	$-(CH_2)_2CH = CMe_2$
1.1683	7.	=	Ξ	H	H	H	ОМе	OMe	Me	H	H	Ξ	ОН	0	-CH2CH=CCl2
1.1684	F.	Ξ	H	H	Ή	H	OMe	OMe	Me	H	Ξ	Ξ	НО	0	−CH2C≡CMe

Table 285

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-CH,CH,-4-Me	-CH2CH=CMe2	-(CH <sub>2</sub> ) <sub>2</sub> CH=CMe <sub>2</sub>	-CH2CH=CCl2	-CH2C≡CMA	-CH2CgH4-4-Ma	-CH2CH=CMe2	-(CH <sub>2</sub> ) <sub>2</sub> CH=CMe <sub>2</sub>	-CH2CH=CCl2	-CH2C≡CMe	-CH2C6H4-4-Me	-CH2CH=CMe2	-(CH <sub>2</sub> ) <sub>2</sub> CH = CMe <sub>2</sub>	-CH2CH=CCl2	-CH2C≡CMe	-CH2C6H4-4-MP	-CH,CH=CMe,	-(CH <sub>2</sub> ) <sub>2</sub> CH=CMe <sub>2</sub>	-CH2CH=CC)	CH2C≡CMe	-CH2C0H4-4-Me	
C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	ĺ
HO	OMs	OMs	OMs	OMs	OMs	НООО	Соон	С00Н	СООН	1000	СН2ОН	СН2ОН	СН2ОН	СН2ОН	СН2ОН	Ğ2.	£4,	ſz,	ſz,	Ŗ	
H	三	Ξ	H	Ξ	=	Ξ	H	H	H	H	H	H	H	Н	H	田	H	H	H	Н	
Ξ	Ξ	H	田	=	=	Ξ	Н	Н	Н	H	Н	Н	Н	Н	H	H	H	Н	Ξ	Н	
Ξ	Ξ	=	Ξ	Ξ	Ξ	Н	Н	Н	H	Н	Н	Н	Н	Н	Н	Ξ	Ξ	Н	Ξ	Н	
Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	
OMe	OMe	OMe	ОМе	ОМе	OMe	ОМе	ОМе	OMe	ОМе	ОМе	ОМе	OMe	OMe	OMe	ОМе	OMe	ОМе	ОМе	ОМе	ОМе	
OMe	OMe	ОМе	OMe	ОМе	OMe	OMe	OMe	OMe	OMe	ОМе	OMe	ОМе	OMe	ОМе	ОМе	OMe	OMe	OMe	OMe	ОМе ОМе	
Ξ	Ξ	=	=	Ξ	11	H	H	=	Ξ	H	Ξ	Ξ	王	Ξ	Н	Н	H	Н	н	H	
H	Ξ	Ξ	=	Ξ	=	Ξ	H	H	H	H	H	H	=	H	н	Н	王	Н	Ħ	Ē	
H	Ξ	Ξ	프	프	=	Ξ	H	Ξ	H	Ξ	=	Ξ	=	Η	Н	Ξ	Ξ	Н	Η	H	
	Ξ	Ξ	H	Ξ	=	Ξ	Ξ	=	=	王	=	=	=	H	H	H	=	H	표	H	
旦	三	٥	Ξ	=	=	H	Ξ	Ξ	H	H	Ξ	Ξ	=	포	H	Ξ		H	H	H	
Œ,	લ	÷	<u> </u>	ત	સ	ન	F	स	Į.	F	T.	P	۳	Ŀ	£.	íz,	£	뚄	ম	Œ,	
1-1685	1.1686	1.1687	1.1688	I-1689	1.1690	I.1691	I-1692	I-1693	1.1694	I-1695	1.1696	I.1697	1.1698	I-1699	I-1700	I-1701	1.1702	I-1703	I-1704	I-1705	

Table 286

1.1706	6	Ξ	Ξ	Ξ	Ξ	Ξ	OMe	OMe	E			Ξ	ОН	0	-CH <sub>2</sub> CH=CMe <sub>2</sub>
1-1707	-1	=	=	Ξ	Ξ	Ξ	OMe	OMe	Ξ	Ξ	Ξ	Ξ	ОН	0	- (CH <sub>2</sub> ) <sub>2</sub> CH=CMe <sub>2</sub>
1.1708	1	Ξ	Ξ	Ξ	H	Η	OMe	OMe	н	Ξ	Ξ	H	ОН	0	-CH2CH=CCl2
1.1709	2	н	Η·	H	Н	=	OMe	ОМе	Н	Ξ	Ξ	Н	ОН	0	-CH2C≡CMe
1.1710	٤.	Ξ	Ξ	=	Ξ	=	OMe	OMe	Ξ	Ξ	Ξ	н	НО	0	-CH2Call4-4-Me
1.1711	-	H	=	H	H	Ξ	OMe	OMe	Н	H	Н	н	ОМв	0	-(CH <sub>2</sub> ) <sub>2</sub> CH=CMe <sub>2</sub>
1.1712	=	Ξ	=	H	Ξ	=	OMe	OMe	Η	Ξ	Н	Н	OMs	0	- CH2CH=CCl2
1.1713	٤	Ξ	Ξ	H	H	Н	ОМе	ОМе	Н	н	Н	Н	OMe	0	- CH <sub>2</sub> C≡CMe
1.1714	:-	Ξ	Ξ	Н	H	H	ОМе	OMe	Н	H	H	H	ОМв	0	-CH2C6H4-4-Me
1.1715	<u>-</u>	Н	Н	Н	Н	Н	OMe	ОМе	н	H	H	Н	СООН	0	-CH2CH=CMe2
1.1716	Œ,	Ξ	Н	H	Н	Н	OMe	OMe	н	Н	Н	Н	соон	0	-(CH2)2CH=CMe2
1.1717	્રા	=	=	H	=	=	ОМа	OMo	=	Ξ	Ξ	H	СООН	0	-CH2CH=CCh2
1.1718	P	Ξ	Ξ	Η	H	王	ОМе	OMe	H	Ξ	Ħ	Н	соон	0	- CH2C≡CMe
I.1719	샙	н	Н	H	H	Ή	OMe	ОМе	Н	Ξ	н	Н	соон	0	-CH2CeH4-4-Me
I-1720	٤	Ξ	=	Н	Ξ	Ξ	OMe	ОМе	H	Ξ	H	H	СН2ОН	0	-CH2CH=CMe2
1.1721	٤	=	=	=	=	=	OMe	OMe	=	Ξ	프	Н	СН2ОН	0	$-(CH_2)_2CH=CMe_2$
1.1722	F	H	Н	H	H	H	OMe	ОМе	Н	Н	Н	H	СН2ОН	0	- CH <sub>2</sub> CH=CCl <sub>2</sub>
I.1723	æ	Ξ	H	Ξ	H	H	OMe	ОМе	Н	Н	Ξ	Н	СН2ОН	0	-CH2C≡CMe
1.1724	ત	Ξ	Ξ	Ξ	Ξ	Ξ	ОМе	ОМе	Н	Н	H	H	СН2ОН	0	-CH2CoH4-4-Me
1.1725	Ŀ	Ξ	H	H	Ξ	Ξ	ОМе	OMe	Н	Н	Н	H	다	0	-CH2CH=CMe2
I-1726	Cė,	н	H	H	H	H	ОМе	OMe	Н	H	Н	H	(द)	0	-(CH <sub>2</sub> ) <sub>2</sub> CH=CMe <sub>2</sub>

Table 287

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		0	64			gs.		~			41									_
- CH <sub>2</sub> CH=CCl <sub>2</sub>	- CH₂C≡CMe	-CH2C6H4-4-Me	-(CH2)2CH=CMe2	-CH2CH=CCl2	-CH2C≡CMe	-CH2C6H4-4-Me	-CH2CH=CMe2	- (CH <sub>2</sub> ) <sub>2</sub> CH=CMe <sub>2</sub>	- CH2CH=CCl2	-CH2C≡CMe	-CH <sub>2</sub> C <sub>6</sub> H <sub>4</sub> -4-Me	-CH2CH=CMe2	$-(CH_2)_2CH=CMe_2$	-CH2CH=CCl2	– CH2C≡CMe	-CH2C6H4-4-Me	-CH2CH=CMe2	$-(CH_2)_2CH=CMe_2$	-CH2CH=CCl2	*ハン=ひ*ロン*
0	0	0	0	0	၁	0	0	0	0	0	0	0	0	0	0	0	0	0	0	•
伍	ম	A	ОН	НО	011	НО	OMs	OMs	OMs	OMs	OMs	нооэ	нооэ	соон	СООН	соон	СН2ОН	CH <sub>2</sub> OH	СН2ОН	OII OII
Ħ	Ξ	Ξ	Н	H	Ξ	Ξ	H	н	Н	Н	Н	Н	Н	Н	H	Н	H	Н	Н	11
Н	Ξ	Ξ	H	Н	=	Ξ	H	H	H	Н	Н	Н	H	Н	Н	Н	Н	Н	Н	ח
H	Ξ	=	Ξ	Ξ	=	Н	Ξ	Ξ	Н	Н	Н	Н	Н	H	Н	H	Н	Н	Н	ב
H	Н	Ξ	011	ОН	OH	IIO	ЮН	НО	НО	ЮН	НО	НО	НО	НО	НО	ОН	ОН	ОН	ОН	но
OMe	OMe	ОМе	OMe	OMe	OMe	ОМе	OMe	OMe	ОМе	ОМе	ОМе	ОМе	ОМе	OMe	OMe	ОМе	OMe	OMe	OMe	ONC.
OMe	OMe	ОМе	OMe	OMe	OMe	ОМе	ОМе	ОМе	OMe	OMe	ОМе	ОМе	OMe	OMe	OMe	ОМе	OMe	OMe	OMe	OMe
三	Ξ	Ξ	~	<u>-</u>	-	Œ,	<u></u>	œ.	드	<u>.</u>	٤	Œ,	<u>-</u>	íz,	Ŀ	(F	Œ,	ĹĽ,	Œ,	G
Ξ	Ξ	Ξ	=	Ξ	=	Ξ	Ξ	王	Ξ	H	Ξ	Ξ	Ξ	H	Н	Н	H	H	H	′ <b>=</b>
	Ξ	Ξ	=	=	=	포	Ξ	Ξ	Ξ	Н	王	H	H	Н	Н	H	H	H	H	2
Ξ	=	Ξ	=	Ξ	=	프	=	Ξ	Ξ	Η	H	Ξ	H	Н	Н	Н	H	Η	H	⊐
Ξ	Ξ		=	=	=	프	Ξ	포	=	Н	Ξ	Η	Ξ	H	Н	H	Ή	Н	H	=
2	ح	6	21	드	2	3	E.	-	ᄄ	Ŀ	Ľ.	Ŗ	હ	Ŗ	F	Œ	Έ. ·	Œ	ᄄ	Ç.
1.1727	1.1728	1.1729	1.1730	I-1731	1-1732	I.1733	I-1734	1.1735	1.1736	I-1737	I.1738	1.1739	1.1740	I-1741	I-1742	1.1743	1.1744	1.1745	I.1746	1.1747

Table 288

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H II H H F OMe OME OH H II H CH2OH O -CH2CaH4-4-Me	II II II II II P OME OME OH H H H F O -CH2CH=CMe2	H II H II F OMe OMe OH H H H G - (CH2)2CH=CMe2	H H H H F OME OME OH H H H F O -CH2CH=CCI2	H H H H II P OME OME OH H H F O -CH2C=CMe	II II II II I' OMe OMe OII H H H F O -CH2C6H-4-Me	H H * H H OMe OMe OH H H H OH OCH2CH=CMe2	11 11 * 11 14 OMe OMe OH H H H OH O -(CH2)2CH=CMe2	H H H + H II OMe OMe OH H H H OH O -CH2CH=CCl2	H H * H H OMe OME OH H H H OH O −CH2C≡CMe	H H * H H OMe OME OH H H H OH O -CH2C6H4-4-Me	11 11 * 11 11 0Me 0Me 011 11 H H OM8 0 -CH2CH=CMe2	11 11 * 11 11 0Me OMe OH H H H OMB O -(CH2)2CH=CMe2	H H + H H OMe OMe OH H H H H OM8 O -CH2CH=CCl2	H H + H H OMe OMe OH H H H OMB O -CH2C≡CMe	11 11 * 11 11 OMe OMe OII II H H OMs O -CH2C6H4-4-Me	H H * H H OMe OMe OH H H H COOH O -CH2CH=CMe2	H H * H H OMe OMe OH H H H COOH O -(CH2)2CH=CMe2	H H + H H OME OME OH H H H COOH O -CH2CH=CCl2	
Ξ	=	=	Ξ	Ξ	=	E	Ξ	$\dashv$	_		_	-			_		$\dashv$		*
=	=	=	Ξ	Ξ	=			$\dashv$			=	=	Ξ	Ξ	Ξ	프	H	H	I
[-	-	도	Œ	Œ	2	-0cH20-*	-0CH2O-*	-0CH20-*	-OCH2O-*	-0cH20-	-Ocilia0 - *	-0CH2O-*	-0CH <sub>2</sub> O-*	-0CH20-	*-05H2O-	-0CH20-	-0CH30-*	-0CH20-*	*-O'HOO-
1.1748	1-1749	1.1750	1.1751	1.1752	1.1753	I-1754 -U	1.17550	1.1756 -0	1.1757 -0	1.1758 -0	1.1759 -0	0- 0921-1	1.1761 -0	1.1762 -0	1.1763 -0	1.1764 -0	1.1765 -0	1.1766 -0	1.1767

Table 289

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					T-	T -	П	П	T -	1	_	т	Τ	_	$\overline{}$		1	_	-	1
-CH <sub>2</sub> CH=CMe <sub>2</sub>	-(CH2)2CH=CMe2	-CH2CH=CCl2	-CH2C≡CMe	-CH2C6H4-4-Me	-CH2CH=CMe2	-(CH2)2CH=CMe2	-CH2CH=CCl2	-CH2C≡CMe	-CH2C6H4-4-Me	-CH2CH=CMe2	-(CH <sub>2</sub> ) <sub>2</sub> CH=CMe <sub>2</sub>	- CH2CH=CCl2	- CH2C≡CMe	-CH2C6H4-4-Me	-CH2CH=CMe2	-(CH <sub>2</sub> ) <sub>2</sub> CH=CMe <sub>2</sub>	-CH2CH=CCl2	- CH2C≡CMe	-CH2C6H4-4-Me	
0	0	ဝ	0	0	၁	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
СН2ОН	СН2ОН	СН2ОН	СН2ОН	СН2ОН	સ	Ŗ	प	A	H	но	НО	НО	ОН	НО	OMe	OMs	OMs	ОМв	OMB	11000
Н	Н	H	·H	H	Ξ	H	H	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	;
Ξ	Н	Ξ	Н	H	Ξ	Н	Н	H	Н	H	Н	Н	Н	Н	Н	Н	Н	Н	Н	3
H	Н	Ξ	Н	Ξ	=	Ħ	H	Н	Н	Н	Н	H	Н	Н	Н	Н	Н	Н	Н	77
HO	ОН	011	ОН	НО	OH	OHI	НО	ОН	ОН	соон	СООН	соон	СООН	соон	соон	соон	соон	соон	соон	H OMe OMe COOH
ОМе	ОМе	OMe OMe	ОМе	OMe	OMe	ОМе	ОМе	ОМе	ОМе	OMe	OMe OMe	OMe	OMe	OMe	OMe OMe	ОМе	OMe	OMe	OMe	OMG
ОМе	OMe		ОМе	ОМе	ОМе	H OMe OMe	ОМе	OMe	OMe	OMe	OMe	OMe	OMe	OMe OMe	OMe	OMe	OMe	OMe	OMe OMe	OMO
	=	Ξ	H	П	=	H	H	H	Η	H	=	Ξ	H	Η	=	H	Ξ	王	H	Ξ
Ξ	픠	=	Ξ	Ξ	=	王	H	H	Н	Н	H	H	Ξ	Н	Ξ	H	H	Ξ	Η	. 1
*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
		듸	Ξ	Ξ	=	=	三	픠	Ξ	三	=	Ξ	표	H	Ξ	Н	H	H	Ξ	1
	=	Ξ	Ξ	=	=	=	Ξ	Ξ	Ξ	Ξ	Ŧ	Ξ	Ŧ	Ξ	=	Ξ	Ξ	H	H	Ξ
-OCH2O-*	*-051130-	+-05H2O-*	-0cH20-*	-OCH2O-*	+-0(1150-+	-0CH2O-*	-0CH20-	-OCH2O-*	-OCH2O-*	-0CH <sub>2</sub> O-*	+-0°H20-	-OCH2O-*	-0CH20-	-0CH20-*	-OCH2O-*	-OCH <sub>2</sub> O-*	OcH20-	-0cH20-*	-0CH2O-*	-OCH30-
1.1768	1.1769	1.1770	1.1771	1-1772	1-177:3	1.1774	I-1775	1-1776	I-1777	1.1778	I-1779	I-1780	I.1781	I-1782	1.1783	1.1784	1.1785	I-1786	1.1787	1.1788

Table 290

1.1789	+-05H2O-	=	=	*	Ξ	Ξ	OMe	OMe	соон	H	Ξ	н	нооэ	0	-(CH2)2CH=CMe2
1.1790	+-051130-	=	Ξ	*	=	=	OMe	OMe	СООН	Н	H	Н	нооэ	0	-CH2CH=CCl2
1.1791	-OCH2O-*	Ξ	=	*	Ξ	11	ОМе	OMe"	соон	H	Н	Н	ПООО	0	- CH₂C≡CMe
1.1792	* - 071120 - *	H	Ξ	*	H	H	ОМе	ОМе	СООН	Ξ	Н	Н	соон	0	-CH2C6H4-4-Me
1.1793	-OCH2O-*	Ξ	Ξ	*	Н	Н	ОМе	OMe	СООН	Н	H	Н	CH2OH	0	- CH <sub>2</sub> CH = CMe <sub>2</sub>
1-1794	-00H2O-	Ξ	H	*	Н	11	ОМе	ОМе	СООН	Н	Н	H	н сн2он	0	$-(CH_2)_2CH = CMe_2$
I-1795	-0cH20-	H	Ξ	*	Н	н	ОМе	OMe	нооэ	Н	Н	Н	СН2ОН	0	- CH <sub>2</sub> CH = CCl <sub>2</sub>
1.1796	-0cH20-	Ξ	Н	*	Н	Н	OMe	OMe	соон	Н	Н	Н	CH2OH	0	-CH2C≡CMe
I-1797	-0cH20-*	픠	Н	*	Н	н	OMe	OMe	нооэ	Н	Н	Н	СН2ОН	0	-CH2C6H4-4-Me
I-1798	-0CH2O-*	H	Н	*	H	H	ОМе	ОМе	соон	Н	Н	Н	म	0	-CH2CH=CMe2
I-1799	+-07H2O-+	Ħ	Н	*	H	H	ОМе	ОМе	СООН	Н	Н	Н	Œ	0	$-(CH_2)_2CH = CMe_2$
1.1800	-OCH <sub>2</sub> O-*	Ξ	Ξ	*	H	11	ОМе	ОМе	соон	Ш	Н	Н	F	0	- CH2CH=CCl2
1.1801	+-02H20-	H	H	*	H	Н	ОМе	ОМе	соон	Н	н	Н	F	0	-CH2C≡CMe
1.1802	-0CH2O-*	Ξ	н	*	Н	Н	OMe	ОМе	соон	Н	Н	Н	Ţ.	0	-CH2C6H4-4-Me
1.1803	-OCH2O-*	Ξ	H	*	Н	H	ОМе	ОМе	СН2ОН	Н	Н	Н	ОН	0	-CH2CH=CMe2
1.1804	-OCH20-*	Ξ	H	*	Η	H	OMe	ОМе	СН2ОН	Н	Н	H	ОН	0	- (CH2)2CH=CMe2
I-1805	-OCH <sub>2</sub> O-*	H	H	*	Η	Ξ	OMe	OMe	СН2ОН	Н	H	H	ОН	0	- CH2CH=CCl2
I.1806	-0CH <sub>2</sub> 0-*	Н	H	*	H	Ξ	OMe	OMe	СН₂ОН	H	H	Н	ОН	0	-CH2C≡CMe
1.1807	-OCH2O-*	Ξ	Ξ	*	Ξ	Ξ	OMe	OMe	СН2ОН	Ξ	H	Ξ	НО	0	-CH2CoH4-4-Me
1.1808	-OCH <sub>2</sub> O-*	Н	Ξ	*	H	H	OMe	OMe	СН2ОН	王	Ξ	Ή	ОМв	0	-CH2CH=CMe2
I.1809	-0CH20-#	H	Н	*	н	H	OMe	OMe	H OMe OMe CH2OH	Н	н	н	ОМв	0	-(CH <sub>2</sub> ) <sub>2</sub> CH=CMe <sub>2</sub>

' Table 291

į															
1.1810	* - OfH3O -	Ξ	Ξ	*	=	П	OMe	OMe	OMe CH2OH	=	Ξ	H	OMs	0	-CH2CH=CCl2
1.1811	-OcH20-*	Ξ	Ξ	*	=	=	OMe	OMe	СП2ОН	H	H	Н	OMs	0	-CH2C≡CMe
1.1812	+-0cH30-*	=	Ξ	*	H	=	ОМе	ОМе	СН2ОП	H	H	H	OMs	0	-CH <sub>2</sub> C <sub>6</sub> H <sub>4</sub> -4-Me
1.1813	-0CH20-*	프	Ξ	*	Н	H	OMe	OMe	СН2ОН	Н	Н	Н	Соон	0	-CH2CH=CMe2
1.1814	+-0cH20-	Ξ	Ξ	*	Н	Ξ	ОМе	ОМе	СН2ОН	Н	H	H	СООН	0	-(CH <sub>2</sub> ) <sub>2</sub> CH=CMe <sub>2</sub>
1.1815	+-04H20-	目	Ξ	*	H	Ξ	OMe	OMe	CH2OH	Н	H	Н	СООН	0	-CH2CH=CCl2
I-1816	-0CH20-	=	H	*	Н	Н	OMe	ОМе	СН2ОН	Н	Н	Н	СООН	0	-CH2C≡CMe
1.1817	-0CH20-*	픠	Н	*	Н	Н	OMe	OMe	СН2ОН	H	н	Н	соон	0	-CH2C6H4-4-Me
1-1818	-0CH20-*	=	Н	*	Н	H	ОМе	OMe	СН2ОН	H	Н	Н	СН2ОН	0	-CH2CH=CMe2
1.1819	-0CH20-*	三	Н	*	Н	Н	ОМе	ОМе	СН2ОН	Н	Н	Н	СН2ОН	0	$-(CH_2)_2CH=CMe_2$
I.1820	-0CH20-*	Ξ	H	*	Н	Н	ОМе	ОМе	CH2OH	Н	H	Н	CH <sub>2</sub> OH	0	- CH2CH=CCI2
1.1821	-OCH2O-*	포	Ξ	*	н	H	ОМе	ОМе	СН2ОН	H	Ή	H	СН2ОН	0	- CH₂C≡CMe
I-1822	-0CH20-*	Ξ	H	*	Н	H	OMe	OMe	СН2ОН	H	Н	H	СН2ОН	0	-CH2C6H4-4-Me
1.1823	-0CH20-*	H	Ξ	*	Ή	H	OMe	OMe	СН2ОН	Ξ	Η	Н	F	0	$-CH_2CH = CMe_2$
1.1824	-OCII20-*	Н	Ξ	*	H	H	OMe	OMe	СН2ОН	H	H	Ξ	F	0	-(CH2)2CH=CMe2
1-1825	-0cH20-*	Н	Ξ	*	王	H	OMe	OMe	СН2ОН	프	Ħ	Ξ	R	0	-CH2CH=CCl2
I-1826	-0cH20-*	H	н	*	H	H	OMe	OMe	СН2ОН	Ħ	Ħ	Ξ	R	0	-CH2C≡CMe
I-1827	-0cH20-*	Н	王	*	Ή	H	ОМе	OMe	СН2ОН	Ξ	H	Ή	Ŗ	0	-CH2C6H4-4-Me
I-1828	-0CH <sub>2</sub> O-*	Н	H	*	H	H	ОМе	OMe	Me	Ħ	Ħ	Ξ	ОН	0	- CH <sub>2</sub> CH = CMe <sub>2</sub>
I.1829	-0CH <sub>2</sub> O-*	Η	H	*	H	H	OMe	OMe	Me	Ξ	Ξ	Ξ	ЮН	0	-(CH2)2CH=CMe2
1-1830	-0CH <sub>2</sub> O-*	H	н	*	Ξ	H	OMe	OMe	Me	H	H	H	НО	0	-CH2CH=CCl2

Table 292

+	*	+	$\dashv$	_	ОМе	Me	=	듸	=	ЮН	0	-CH₂C≡CMe
*	+	王	=	OMe	OMe	Me		三		OH	0	-CH2C6H4-4-Me
*	$\dashv$			OMe	OMe	Me	=	Ξ	三	OMs	0	-CH <sub>2</sub> CH=CMe <sub>2</sub>
*	-+	=	H	ОМе	OMe	Me	=	王	Ξ	ОМв	0	$-(CH_2)_2CH=CMe_2$
* =	$\dashv$	Ξ	=	OMe	OMe	Me	=	Ξ	Ξ	ОМв	0	-CH2CH=CCl2
*			=	OMe	OMe	Me	Ξ	=	Ξ	OMB	0	-CH2C≡CMe
* =		H	Ξ	OMe	OMe	Me	Ξ	H	H	OMs	0	-CH <sub>2</sub> C <sub>6</sub> H <sub>4</sub> -4-Me
*	$\dashv$	H	H	OMe	OMe	Me	Ξ	Ξ	Ξ	соон	0	-CH2CH=CMe2
*	-	H	H	OMe	OMe	· Me	H	H	Н	СООН	0	-(CH <sub>2</sub> ) <sub>2</sub> CH=CMe <sub>2</sub>
*	-	=	=	OMe	OMe	Me	=	Ξ	Ξ	СООН	0	-CH2CH=CCl2
*	-	H	H	OMe	ОМе	Me	Ξ	Ξ	Ξ	СООН	0	− CH <sub>2</sub> C≡CMe
*	$\dashv$	H	H	OMe	OMe	Me	三	프	Ξ	СООН	0	-CH2C6H4-4-Me
*			=	OMe	OMe	Me	=	三	Ξ	СН2ОН	0	-CH2CH=CMe2
*	$\dashv$	<u> </u>	=	OMe	OMe	Me	王	Ξ	Ξ	СН2ОН	0	-(CH <sub>2</sub> ) <sub>2</sub> CH=CMe <sub>2</sub>
* H	$\dashv$	H	H	OMe	OMe	Me	Ξ	Ξ	Ξ	СН2ОН	0	-CH2CH=CCl2
*	-	크	Н	OMe	OMe	Me	Ħ	Ξ	Ξ	СН2ОН	0	-CH2C≡CMe
*	-	H	H	OMe	OMe	Me	H	프	Ħ	СН2ОН	0	-CH2C6H4-4-Me
*	$\dashv$	H	Н	OMe	ОМе	Me	Ή	Ξ	Ξ	[E4	0	-CH2CH=CMe2
* H	$\dashv$	H	_	OMe	ОМе	Me	H	Ξ	Ξ	Œ,	0	-(CH2)2CH=CMe2
*		HH	-+	ОМе	ОМе	Me	H	H	H	ᅜ	0	-CH2CH=CCl2
* H	$\dashv$	H	н	ОМе	OMe	Me	H	Ξ	프	ᄕ	0	-CH2C≡CMe

Table 293

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₹	2	ة ا		•	3	2 6	63			1		1	:				ء [	T	Τ	0
-CH <sub>2</sub> C <sub>4</sub> H <sub>4</sub> -4-M <sub>2</sub>	-CH2CH=CMe3	-(CH <sub>2</sub> ),CH=CMe,	-CH <sub>2</sub> CH=CCI <sub>3</sub>	-CH2C≡CMe	-CH2CaH4-4-Ma	-CH <sub>2</sub> CH=CMe <sub>2</sub>	- (CH <sub>2</sub> ) <sub>2</sub> CH = CMe <sub>2</sub>	-CH2CH=CCl3	-CH,C≡CMe	-CH2C6H1-4-MA	CH2CH=CM62	- (CH <sub>2</sub> ) <sub>2</sub> CH=CMe <sub>2</sub>	-CH2CH=CCI2	– CH <sub>2</sub> C≡CM <sub>P</sub>	-CH2C4H1-4-Ma	-CH <sub>2</sub> CH=CM <sub>2</sub>	-(CH <sub>2</sub> ) <sub>2</sub> CH = CM <sub>6</sub> ,	-CH2CH=CC3	– CH2C≡CMe	-CH2C6H4-4-Me
0	0	O	0	0	0	0	0	0	0	0	0	0	0	0			+	┼-	0	┝╌┥
Œ	НО	НО	НО	ЮН	НО	OMs	OMs	OMs	OMs	OMs	НООО	НООО	нооэ	НООО	COOH	CH <sub>2</sub> OH	СН2ОН	СН2ОН	СН2ОН	СН2ОН
Ξ	H	H	H	Ħ	Ξ	H	Н	H	Ξ	Ξ	=	H	Ξ	H	=	┼	╁	H	H	H
=	Ξ	Н	H	H	H	Н	Н	Н	Н	Ħ	=	н	H	Ħ	H	Ħ	H	H	H	H
E	Ξ	H	Ξ	=	Ξ	Ξ	H	Н	H	Н	=	Н	Н	H	Ξ	Ξ	田	H	Н	H
Me	11	Н	Н	П	111	H	H	Н	Н	Н	И	Н	Н	Н	H	н	Н	Н	Н	H
OMe	OMe	ОМе	OMe	ОМе	ОМе	OMe	ОМе	ОМе	ОМе	ОМе	OMe	OMe	OMe	ОМе	ОМе	OMe	OMe	OMe	OMe	ОМе
OMe	ОМе	OMe	ОМе	ОМе	ОМе	ОМе	OMe	ОМе	ОМе	ОМе	OMe	OMe	OMe	OMe	OMe	ОМе	OMe	OMe	OMe	OMe OMe
=	·=	Ξ	Ξ	=	=	=	=	Ξ	Ξ	H	Ξ	Ξ	Ξ	王	=	Н	H	Ξ	H	H
=	=	=	=	=	=	王	三	H	H	. =	王	三	田	H	=	Н	H	H	H	H
*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
=	=	=	=	=	=	=	=	三	=	王	=		田	王	=	Ξ	=	田	三	H
三	=	Ξ	=	Ξ	=	Ξ	Ξ	王	三	王	Ξ	=	三	三	=	H	田	三	H	H
-OCH2O-*	-OCH50-*	-0cH20-*	-OCH20-*	-OCH2O-*	-OCH30-*	OZH2O	-0CH20-*	-OCH20-*	-0CH20-*	-0CH <sub>2</sub> O-*	-0cH20-*	-OCH2O-*	-0cH20-*	-0CH20-*	-OCH2O-*	-0CH <sub>2</sub> O-*	-OCH2O-*	-OCH <sub>2</sub> O-*	-0cH <sub>2</sub> 0-*	-0cH20-*
1.1852	1-1853	1.1854	1-1855	1.1856	1-1857	1.1858	I.1859	1.1860	1.1861	1.1862	1.1863	1-1864	I.1865	I.1866	1.1867	I-1868	I-1869	I-1870	1.1871	1.1872

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Table 294

e <sub>2</sub>	Mez	12	- A	Me	6	Mez	12		Me	62	le <sub>2</sub>			Me	200	le <sub>2</sub>	8		e V	,
-CH <sub>2</sub> CH=CMe <sub>2</sub>	- (CH <sub>2</sub> ) <sub>2</sub> CH = CMe <sub>2</sub>	-CH2CH=CCI2	-CH2C≡CMe	-CH2C6H4-4-Me	-CH2CH=CMe2	-(CH2)2CH=CMe2	- CH2CH = CCl2	- CH2C≡CMe	-CH2C6H4-4-Me	-CH,CH=CMe2	- (CH2)2CH = CMe2	- CH2CH = CCl2	-CH2C≡CMe	-CH <sub>2</sub> C <sub>6</sub> H <sub>4</sub> -4-Me	-CH2CH=CMe2	$-(CH_2)_2CH = CMe_2$	-CH2CH=CCl2	-CH2C≡CMe	-CH2C6H4-4-Me	-010-UU-
0	0	0	0	0	0	0	၁	0	0	0	0	0	0	0	0	0	0	0	0	6
Ŧ.	प्र	Ŀ	Ľ,	Ē	НО	НО	OH	НО	НО	OMs	ОМв	ОМв	OMB	OMs	соон	СООН	соон	СООН	нооэ	HO.H.
Ξ	Н	Н	H	Н	H.	Н	Н	Н	Н	Н	H	н	Н	Н	Н	Н	Н	H	Н	H
Ħ	Н	Н	=	Н	H	Н	11	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	н
Ξ	Ή	Н	H	Н	Н	Н	Ξ	H	Н	н	Н	Н	Н	н	Н	Н	Н	Н	Н	Н
H	Ή	н	11	Н	ОН	НО	IIO	OH	ОН	ОН	ОН	ОН	ОН	OH	ОН	ОН	ОН	ОН	ОН	НО
ОМе	ОМе	OMe	OMe	ОМе	ОМе	ОМе	ОМе	OMe	OMe	OMe	ОМе	ОМе	OMe	OMe	OMe	OMe	OMe	OMe	ОМе	ОМе
OMe	ОМе	OMe	OMo	OMe	OMe	ОМе	OMe	OMe	OMe	ОМе	OMe	ОМе	OMe	OMe	OMe	OMe	OMe	ОМе	OMe	ОМе
=	프	Ξ	=	Н	ા	F	2	<u>-</u>	Œ,	Ŀ	F	Œ	Ŀ	٤.	G	Ŀ	Œ	Œ,	Ŀ	Ę.
크	Ξ	=	=	Ξ	H	H	.=	=	Ξ	Ξ	Η	Ξ	H	=	H	H	Ξ	Ξ	Ξ	H
*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
=	Ξ	=	=	Н	II	=	=	Ξ	王	=	¥	王	=	=	=	=	Ξ	=	三	H
크	Ξ	Ξ	Ξ	Ξ	Ξ	Ξ	=	=	Н	=	Ξ	Ξ	Ξ	=	Ξ	H	Ξ	王	王	H
OcH2O- *	-OCH <sub>2</sub> O-*	-OCH2O-*	+-OcH2O-+	-0CH20-*	-0CH <sup>2</sup> O-*	-OCH2O-	-OCH5O-*	-OCH20-*	-OCH <sub>2</sub> O-*	+-0ºH20-	-0CH2O-*	-0CH <sub>2</sub> O-*	-0cH20-*	-OCH2O-*	OCH <sub>2</sub> O *	-OCH <sub>2</sub> O-*	-0CH20-*	-0CH2O-*	-OCH2O-*	-0CH <sub>2</sub> 0-*
1.1873	1.1874	1.1875	1.1876	1-1877	1.1878	1.1879	1.1880	1.1881	I.1882	1.1883	1.1884	I-1885	I-1886	1.1887	1.1888	1.1889	1.1890	1.1891	1.1892	1.1893

Table 295

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								_	_	_	_									
-(CH <sub>2</sub> ) <sub>2</sub> CH=CMe <sub>2</sub>	-CH2CH=CCl2	-CH2C≡CMe	-CH2C6H4-4-Me	CH2CH=CMe2	$-(CH_2)_2CH = CMe_2$	-CH2CH=CCl2	-CH2C≡CMe	-CH2C6H4-4-Me	$-(CH_2)_2CH=CMe_2$	"HOD=HOTHO-	CH2C≡CMe	-CH <sub>2</sub> CH = CMe <sub>2</sub>	- (CH <sub>2</sub> ) <sub>2</sub> CH=CMe <sub>2</sub>	-CH2CH=CCI2	- CH2C≡CMe	-CH2C6H4-4-Me	-CH2CH=CMe2	$-(CH_2)_2CH = CMe_2$	- CH2CH = CCl2	- CH2C≡CMe
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CH2OH	СН2ОН	CH2OH	СН2ОН	F	F	F	F	F	но	ОН	ОН	OMs	OMs	OMe	ОМв	ОМв	СООН	соон	соон	СООН
н	H	н	H	Н	Н	Н	Н	Н	Н	Н	Н	H	Н	Н	Н	Н	Н	Н	Н	Н
H	Ή	¥	H	Н	Н	Н	Н	Н	H	Н	Н	Н	H	Н	Н	Н	Н	Н	н	Н
Ξ	Ξ	=	H	H	=	Н	Н	Н	Ξ	Н	H	Η	H	H	Н	H	Н	H	H	н
НО	НО	Ю	OH	НО	011	ОН	ЮН	ОН	НО	ОН	ОН	НО	ОН	ОН	ОН	ОН	ОН	ОН	ОН	НО
ОМе	OMe	OMe	OMe	ОМе	OMe	ОМе	OMe	OMe	ОМе	ОМе	ОМе	OMe	ОМе	ОМе	ОМе	ОМе	OMe	OMe	OMe	ОМе
OMe	OMe	OMe	OMe	ОМе	OMe	OMe	OMe	OMe	OMe	OMe	OMe	OMe	OMe	ОМе	ОМе	OMe	OMe	OMe	OMe	OMe
=	-	-	٢.	<u>-</u>	-	<u>:</u> -,	-	મ	H	Н	H	Ξ	H	H	H	H	H	H	H	H
=	Ξ	Ξ	Ξ	=	=	Н	H	Н	H	Н	Ξ	Ξ	H	Н	н	Ξ	H	Н	王	Έ.
*	*	*	*	*	*	*	*	*	Н	H	Ξ	Ξ	Н	H	H	Ξ	H	H	王	H
	Ξ	=	=	Ξ	Ξ	Н	H	Ξ	=	H	Ξ	=	Ξ	H	H	Ξ	王	王	H	H
	Ξ	ا	릐	=	=	Ξ	H	Ξ	=	H	H	Ξ	H	H	H	H	프	田	H	H
-00H20-*	-OCH2O-*	-0CH20-*	-0cH20-*	+-07H20-	+-OzH2O-+	-OCH2O-*	-OCH2O-*	+-0cH20-	NMe <sub>2</sub>	NMe <sub>2</sub>	NMe <sub>2</sub>	NMe2	NMe <sub>2</sub>	NMe <sub>2</sub>	NMe <sub>2</sub>	NMe <sub>2</sub>	NMe <sub>2</sub>	NMe <sub>2</sub>	NMe <sub>2</sub>	NMe <sub>2</sub>
1.1894	1.1895	1.1896	1-1897	1-1898	1-1899	1.1900	I.1901	I.1902	1.1903	I.1904	1.1905	1.1906	I.1907	1.1908	1.1909	1-1910	1.1911	1.1912	1.1913	1.1914

Table 296

0 -CH <sub>2</sub> C <sub>6</sub> H <sub>4</sub> -4-Me	0 -CH2CH=CMe2	0 - (CH2)2CH = CMe2	0 -CH2CH=CCl2	0 —CH₂C≡CMe	O -CH2C6H4-4-Me	0 -CH2CH=CMe2	O -(CH <sub>2</sub> ) <sub>2</sub> CH=CMe <sub>2</sub>	O -CH2CH=CCl2	0 −CH2C≡CMe	0 -CH <sub>2</sub> C <sub>6</sub> H <sub>4</sub> -4-Me	0 -CH <sub>2</sub> CH=CMe <sub>2</sub>	O -(CH <sub>2</sub> ) <sub>2</sub> CH=CMe <sub>2</sub>	-CH <sub>2</sub> CH=CCl <sub>2</sub>	) —CH2C≡CMe	0 -CH <sub>2</sub> C <sub>6</sub> H <sub>4</sub> -4-Me	CH <sub>2</sub> CH=CMe <sub>2</sub>	) -(CH <sub>2</sub> ) <sub>2</sub> CH=CMe <sub>2</sub>	-CH2CH=CCl2	O − CH2C≡CMe	0 -CH2C6H4-4-Me
-		_	$\dashv$			$\dashv$	$\dashv$	$\dashv$	$\overline{}$	$\dashv$	-	$\dashv$	-	0	긔	0	0	0	0	
СООН	СН2ОН	СН2ОН	СН2ОН	СН2ОН	СН2ОН	E.	Ţ.	ሌ	ᄕᆂ	(Z.	HO	ЮН	ОН	ОН	ЮН	OMs	OMs	OMs	ОМв	ОМв
=	Ξ	王	. <del>T</del>	Ξ	Ξ	Ξ	H	프	Ξ	H	Ξ	Ξ	Ξ	Н	Ξ	Ή	Н	H	H	Н
三	Ξ	エ	프	Ξ	Ξ	王	H	Ξ	Ξ	Ŧ	Ξ	Ξ	Ξ	Ξ	Ξ	H	Ξ	Ξ	H	H
	Ξ	Ξ	三	=	Ξ	Ξ	Ξ	표	Ħ	Ή	Ξ	Ξ	Н	Н	Η	H	H	H	Н	Н
OH	OH	НО	НО	НО	НО	. но	НО	НО	ЮН	НО	СООН	СООН	СООН	СООН	СООН	СООН	СООН	Н000	соон	СООН
OMe	OMe	OMe	OMe	ОМе	OMe	OMe	OMe	OMe	ОМе	OMe	ОМе	ОМе	OMe	ОМе	ОМе	OMe	OMe	OMe	OMe	OMe OMe
OMe	OMe	OMe	OMe	OMe	ОМе	OMe	ОМе	ОМе	ОМе	ОМе	ОМе	ОМе	ОМе	ОМе	ОМе	OMe	ОМе	ОМе	ОМе	OMe
Ξ	=	Ξ	Н	H	=	H	Н	Н	Н	Н	Ξ	Ξ	Н	H	=	H	H	Н	Ξ	Н
E	=	Ξ	Ξ	=	Ξ	H	Н	Н	Н	Н	=	Η	Н	Н	Ξ	Н	Н	H	Ξ	⁄Ξ
Ξ	=	Η	포	=	=	H	Н	Н	Н	Н	Ξ	Н	Н	Н	=	H	Н	Н	H	Н
Ξ	=	Ξ	Ĥ	Ξ	ΙΪ	=	Н	H	Н	Н	Ξ	=	Ξ	H	=	Ξ	Ξ	H	H	H
三	=	Ξ	王	=	=	Ξ	Н	H	Н	Н	Ξ	Ξ	Н	Н	=	H	н	Н	Н	Н
NMe	NMe <sub>2</sub>	NMe <sub>2</sub>	NMe <sub>2</sub>	NMe	NMe	NMe <sub>2</sub>	NMe <sub>2</sub>	NMe <sub>2</sub>	NMe <sub>2</sub>	NMe <sub>2</sub>	NMe <sub>2</sub>	NMe <sub>2</sub>	NMe <sub>2</sub>	NMe <sub>2</sub>	NMe <sub>2</sub>	NMe <sub>2</sub>	NMe <sub>2</sub>	NMe <sub>2</sub>	NMe <sub>2</sub>	NMe2
1.1915	1.1916	1-1917	1.1918	1.1919	1.1920	1.1921	1.1922	I.1923	I.1924	1.1925	1.1926	1-1927	1.1928	1.1929	1-1930	1.1931	1.1932	I.1933	I-1934	I.1935

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				0	Γ	N			0		8			6		8			_	Т
-CH <sub>2</sub> CH <sub>2</sub> CM <sub>2</sub> .	-(CH <sub>2</sub> ) <sub>2</sub> CH=CMe <sub>2</sub>	-CH2CH=CCl2	-CH₂C≡CMe	-CH2C6H4-4-Me	-CH2CH=CMe2	$-(CH_2)_2CH = CMe_2$	- CH2CH=CCl2	-CH2C≡CMe	-CH2C6H4-4-Me	-CH2CH=CMe2	$-(CH_2)_2CH = CMe_2$	-CH2CH=CCl2	-CH2C≡CMe	-CH2C6H4-4-Me	-CH2CH=CMe2	-(CH <sub>2</sub> ) <sub>2</sub> CH=CMe <sub>2</sub>	-CH2CH=CCl2	-CH2C≡CMe	-CH2C6H4-4-Me	
٥	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(
0001	H000	Н000	соон	СООН	СН2ОН	СН2ОН	СН2ОН	СН2ОН	СН2ОН	Ľ,	A	£	F	F	0Н	ОН	ОН	ОН	ОН	3.00
=	Ξ	H	Н	H	H	H	H	Н	H	Н	Н	H	Н	Н	Н	Н	Н	Н	Н	:
	=	Ξ	H.	H	Н	Ξ	H	H	H	H	Н	Н	H	Н	Н	H	Н	Н	Н	2
=	=	Ξ	Н	Ξ	Н	Н	H	H	Н	Н	H	Н	Н	Н	Н	H	Н	H	Н	ם
C00H	1	соон	СООН	СООН	СООН	нооэ	СООН	СООН	СООН	СООН	СООН	СООН	соон	соон	СН2ОН	СН2ОН	СН2ОН	СН2ОН	CH2OH	OMe CHOU
OMe OMe	OMe	ОМе	ОМе	OMe	ОМе	ОМе	OMe	OMe	ОМе	OMe	OMe	OMe	OMe	OMe	OMe	ОМе	OMe	OMe	OMe	OMG
OMe	OMe	ОМе	ОМе	OMe	ОМе	OMe	OMe	ОМе	ОМе	OMe	ОМе	OMe	ОМе	ОМе	OMe	OMe	OMe	OMe	OMe	OMO
=	Ξ	=	Ξ	=	Ξ	=	Ξ	Н	H	H	H	H	H	Ξ	Ξ	H	Ħ	Ξ	Ξ	Ξ
E	Ξ	Н	Ξ	Ξ	Н	H	H	Н	H	H	Ξ	H	H	H	王	王	Ξ	Ή	H	Ξ
=	Ξ	Н	H	H	Н	H	H	H	Н	三	Ξ	Ξ	H	Ξ	H	田	三	Ξ	Ή	ב
	=	H	H	Ξ	Ξ	=	Ξ	H	H	Ξ	H	H	Ξ	H	王	H	Ξ	H	H	Ħ
E	=	Ξ	Η	Ξ	H	王	Ξ	H	H	H	Ξ	H	H	Ξ	=	H	三	Ξ	Ξ	. =
NMe	NMe <sub>2</sub>	NMe <sub>2</sub>	NMe	NMe <sub>2</sub>	NMe <sub>2</sub>	NMe <sub>2</sub>	NMe2	NMe <sub>2</sub>	NMe <sub>2</sub>	NMe <sub>2</sub>	NMe2	NMe <sub>2</sub>	NMe2	NMe <sub>2</sub>	NMe <sub>2</sub>	NMe				
1.1936	1.1937	1.1938	I.199	1.190	1.1941	1.1942	1.1943	1.1944	1.1945	I.1946	1-1947	I-1948	I-1949	1.1950	1.1951	I-1952	I-1953	1.1954	1.1955	1.1956

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1-1957	NMez	Ξ	Ξ	=	Ξ	=	OMe	ОМе	CIIzOH	Ξ	Ξ	Ξ	ОМв	0	- (CH <sub>2</sub> ) <sub>2</sub> CH=CMe <sub>2</sub>
1.1958	NMez	Ξ	H	Ξ	Η	=	OMe	ОМе	СН2ОН	Ξ	Ξ	Ξ	ОМв	0	-CH2CH=CCl2
1.1959	NMez	11	11	Н	Ξ	=	ОМе	OMe	CH2OH	=	H	Ξ	OMe	0	-CH2C≡CMe
0961-1	NMez	11	.11	11	11	=	OMe	ОМе	CHZOH	=	H	=	OMB	0	-CH2C6H4-4-Me
1.1961	NMe <sub>2</sub>	H	Н	н	н	11	ОМе		OMe CH2OH	=	Η	H	COOII	0	-CH2CH=CMe2
1-1962	NMez	11	II	н	11	=	ОМе	OMe	СН2ОН	=	H	=	НООО	0	-(CH2)2CH = CMe2
1-1963	NMez	H	н	Н	н	Ξ	ОМе	OMe	СН2ОН	Ξ	H	Ξ	нооэ	0	-CH2CH=CCl2
1-1964	NMez	H	11	н	П	H	OMe	ОМе	СН2ОН	Ξ	Н	H	нооэ	0	-CH2C≡CMe
I-1965	NMe <sub>2</sub>	Н	Н	Н	Н	H	OMe	OMe	СН2ОН	Ξ	Н	H	соон	0	-CH2C6H4-4-Me
1.1966	NMe <sub>2</sub>	Н	Н	Н	Н	Н	OMe	OMe	СН2ОН	Н	Н	Н	СН2ОН	0	-CH2CH=CMe2
1-1967	NMe <sub>2</sub>	Н	Н	Н	H	H	OMe	ОМе	СН2ОН	Ξ	Ή	Ξ	СН2ОН	0	-(CH <sub>2</sub> ) <sub>2</sub> CH=CMe <sub>2</sub>
1.198	NMez	Н	H	н	Η	Ξ	ОМе		OMe CH2OH	Ξ	H	Ξ	СН2ОН	0	-CH2CII=CCI2
I-1969	NMe <sub>2</sub>	Н	Н	Н	H	H	ОМе	ОМе	СН2ОН	Ξ	Н	Ξ	СН2ОН	0	-CH₂C≡CMe
1.1970	NMe <sub>2</sub>	Н	H	Н	Н	Н	OMe	OMe	СН2ОН	H	H	H	СН2ОН	0	-CH2C6H4-4-Me
1.1971	NMe <sub>2</sub>	Н	Н	Н	Н	H	ОМе	ОМе	OMe CH2OH	H	H	H	Ŀ	0	-CH2CH=CMe2
1.1972	NMe <sub>2</sub>	H	H	Н	Н	Н	OMe	OMe	СН2ОН	H	Н	H	Œ	0	-(CH2)2CH=CMe2
1.1973	NMe2	Н	Н	Н	Н	Н	OMe	OMe	СН2ОН	Ξ	H	王	Œ	0	-CH2CH=CCl2
I-1974	NMe <sub>2</sub>	H	н	Н	Н	Н	OMe	ОМе	ОМе СН2ОН	H	Н	Ξ	Œ,	0	-CH₂C≡CMe
I.1975	NMe <sub>2</sub>	Н	Н	Н	Н	Н	OMe	ОМе	СН2ОН	Ħ	Н	H	F	0	-CH2C6H4-4-Me
I-1976	NMez	Н	H	Н	Н	Н	OMe	ОМе	Me	Ξ	H	H	НО	0	-CH2CH=CMe2
I-1977	NMe <sub>2</sub>	Н	Ή	Ξ	Ħ	H	ОМе	OMe	Me	H	H	H	ОН	0	-(CH <sub>2</sub> ) <sub>2</sub> CH=CMe <sub>2</sub>

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		-	-	-	-					ļ						
1.1978	NMe <sub>2</sub>					=	OMe	OMe	Me	Ξ	H	Ξ	НО	0	-CH2CH=CCl2	
1.1979	NMe <sub>2</sub>	Ξ	=	=	=	=	OMe	OMe	Me	Н	н	Н	НО	0	-CH2C≡CMe	
1.1980	NMc2	王	Ξ	Ξ	Ξ	Ξ	OMe	OMe	Me	=	H	Н	НО	0	-CH2C6H4-4-Me	
1.1981	NMc2	듸	=	=	=	Ξ	ОМе	ОМе	Me	Ξ	Н	Ξ	OMs	0	-CH2CH=CMe2	
1.1982	NMe <sub>2</sub>	=	Ξ	=	=	Ξ	OMe	ОМе	Me	Ξ	Ħ	Ξ	OMs	0	-(CH <sub>2</sub> ) <sub>2</sub> CH=CMe <sub>2</sub>	
1-1983	NMc2	=	Ξ	=		=	ОМе	OMe	Me	=	Ξ	Ξ	OM8	0	-CH2CH=CCl2	
1.1984	NMe <sub>2</sub>	=	Ξ	=	Ξ	Ξ	OMe	OMe	Me	Н	Н	Ξ	OMs	0	-CH <sub>2</sub> C≡CMe	
I-1985	NMe <sub>2</sub>	Ξ	三	王	Ξ	Н	ОМе	ОМе	Me	н	H	H	OMs	0	-CH2C6H4-4-Me	
1.1986	NMe <sub>2</sub>	王	=	三	H	н	ОМе	ОМе	Me	Ή	Н	Н	СООН	0	-CH2CH=CMe2	
I-1987	NMe <sub>2</sub>	Ξ	Ξ	Ξ	티	H	ОМе	ОМе	Me	H	Н	Н	соон	0	-(CH2)2CH=CMe2	
1.1988	NMe <sub>2</sub>	王	Ξ	Ξ	Ξ	Η	ОМе	ОМе	Me	H	Н	H	СООН	0	-CH2CH=CCl2	
I-1989	NMe	=	=	Ξ	=	Η	OMe	OMe	Me	н	Н	Н	НООЭ	c	-CH2C≡CMe	
1.1990	NMe <sub>2</sub>	Ξ	=	=	Ξ	=	ОМе	ОМе	Me	Н	H	н	СООН	0	-CH2C6H4-4-Me	
I-1991	NMe2	Ξ	H	H	Н	Η	OMe	OMe	Me	Н	Н	Н	СН2ОН	0	-CH2CH=CMe2	
I-1992	NMe <sub>2</sub>	Ξ	Ξ	H	H	Ξ	OMe	OMe	Me	Н	Н	Н	СН2ОН	0	- (CH <sub>2</sub> ) <sub>2</sub> CH=CMe <sub>2</sub>	
1.1993	NMe <sub>2</sub>	=	=	Ξ	H	=	OMe	ОМе	Me	н	Н	Н	но²нэ	0	- CH2CH=CCl2	
I-1994	NMe <sub>2</sub>	Н	H	H	H	H	ОМе	OMe	Me	Н	Н	Н	но <sup>г</sup> но	0	-CH₂C≡CMe	
1.1995	NMe <sub>2</sub>	Н	Н	Н	Н	н	OMe	OMe	Me	Н	Н	Н	СН2ОН	0	-CH <sub>2</sub> C <sub>6</sub> H <sub>4</sub> -4-Me	
1.1996	NMe <sub>2</sub>	Н	Н	Н	Н	H	OMe	OMe	Me	Н	Н	Н	ĹĿ,	0	- CH2CH=CMe2	
1.1997	NMe <sub>2</sub>	Ξ	Ξ	H	Н	H	OMe	OMe	Me	H	Н	H	伍	0	-(CH2)2CH=CMe2	
I.1998	NMez	H	H	H	Ξ	H	OMe	OMe	Me	Н	H	Ξ	ſz.	6	-CH,CH=CCI,	

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1.1999	NMez	H	Ξ	H	Ξ	=	OMe	OMe	Me	H	H	Н	ŭ	0	– CH2C≡CMe
1.2000	NMe <sub>2</sub>	H	Ξ	H	н	Ξ	OMe	OMe	Me	Ξ	Ξ	H	ዣ	0	-CH <sub>2</sub> C <sub>6</sub> H <sub>4</sub> -4-Me
1.2001	NMe2	Н	Ξ	11	Н	Н	OMe	OMe	Ξ	Ξ	프	Ξ	НО	0	-CH2CH=CMe2
1.2002	NMe <sub>2</sub>	Н	111	H	Н	Н	ОМе	ОМе	Н	Ξ	Ή	Ξ	НО	0	-(CH2)2CH=CMe2
1.2003	NMe <sub>2</sub>	П	Ξ	H	H	11	ОМе	OMe	Ш	=	Ξ	Ξ	011	0	-CH2CH=CCl2
1.204	NMe <sub>2</sub>	Ξ	11	П	11	==	ОМе	OMe	=	=	=	=	HO	၁	-CH2C≡CMe
1.2005	NMe <sub>2</sub>	11	H	Н	Н	=	OMe	OMe	=		=	Ξ	OH	0	-CH2C6114-4-Me
1.2006	NMe <sub>2</sub>	Н	Н	Н	Н	Н	ОМе	ОМе	Н	Ξ	H	Н	ОМв	0	-CH2CH=CMe2
1.2007	NMe <sub>2</sub>	Н	Н	Н	Н	Н	ОМе	ОМе	Н	Ξ	Ξ	H	ОМв	0	-(CH2)2CH = CMe2
1.2008	NMe <sub>2</sub>	Н	Н	Н	Н	H	OMe	OMe	H	Ξ	프	H	ОМв	0	- CH2CH=CCl2
1.2009	NMe <sub>2</sub>	Н	Н	Н	Н	Н	OMe	OMe	н	표	H	Н	OMs	0	-CH2C≡CMe
1.2010	NMc2	П	11	Н	н	Ξ	OMe	ОМе	Н	Ξ	Ξ	Ξ	ОМв	0	-CH2CgH4-4-Me
1.2011	NMc <sub>2</sub>	H	H	Н	н	H	OMe	OMe	Н	Ξ	Ξ	Ξ	С00Н	0	-CH2CH=CMe2
1.2012	NMe <sub>2</sub>	Н	Н	Н	Н	Н	OMe	ОМе	Н	Ħ	Ħ	Ξ	СООН	0	- (CH <sub>2</sub> ) <sub>2</sub> CH=CMe <sub>2</sub>
1.2013	NMe <sub>2</sub>	Н	Н	Н	Н	Н	OMe	ОМе	Н	프	Ξ	H	Н000	0	-CH2CH=CCl2
1.2014	NMe	Н	Н	Н	Н	п	ОМе	OMe	Н	王	王	H	С00Н	0	- CH2C≡CMe
1.2015	NMe <sub>2</sub>	Н	Н	H	Н	Н	OMe	ОМе	Н	三	王	H	НООО	0	-CH2C6H4-4-Me
1.2016	NMe2	Н	н	Н	Н	H	OMe	ОМе	Н	Ξ	Ξ	H	СН1ОН	0	-CH2CH=CMe2
1.2017	NMe <sub>2</sub>	Н	Н	Н	Н	Ξ	OMe	ОМе	Н	Ξ	H	Ξ	СН2ОН	0	-(CH2)2CH=CMe2
1.2018	NMe	Н	н	н	Н	Ξ	OMe	OMe	H	Ξ	H	H	СН2ОН	0	-CH2CH=CCl2
1.2019	NMez	Н	н	Н	Н	H	OMe	ОМе	Н	프	Ξ	H	СН1ОН	0	CH2C≅CMe

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5	-CH2C6H4-4-Me	-CH2CH=CMe2	$-(CH_2)_2CH = CMe_2$	-CH2CH=CCl2	-CH2C≡CMe	1-1-Me	=CMe2	H=CMe2	I=CCl2	≡CMe	1-4-Me	=CMe2	H=CMe2	I=CCl <sub>2</sub>	≡CMe	-4-Me	=CMe2	H=CMe2	=CCl2	≡CMe	-4-Me
10	-CH2C6H	-CH2CI	- (CH <sub>2</sub> ) <sub>2</sub> C	-CH2CI	-CH2C	-CH2Call4-4-Me	-CH2CH=CMe2	-(CH2)2CH=CMe2	-CH2CH=CCl2	-CH2C≡CMe	-CH2C6H4-4-Me	- CH2CH=CMe2	-(CH2)2CH = CMe2	-CH2CH=CCl2	-CH2C≡CMe	-CH2C6H4-4-Me	-CH2CH=CMe2	-(CH2)2CH=CMe2	-CH2CH=CCl2	-CH2C≡CMe	-CH2C8H4-4-Me
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	СН₂ОН	더	᠘	સ	ᄕ	Œ,	НО	ОН	ОН	ОН	НО	OMe	OMs	OMs	OMs	ОМв	нооэ	СООН	соон	ноор	COOH
20	H	H	Ξ	Ξ	H	H	Ξ	Н	Н	Н	H	H	H	田	Н	H	H	H	Н	王	H
20	Ξ	Ή	H	Ξ	Ξ	Ξ	H	H	Н	H	H	Ξ	Ξ	H	Η	H	H	H	H	三	H
	Ξ	H	=	=	=	=	=	Ξ	=	Ξ	王	Ξ	Ħ	Ξ	Η	Ξ	H	Ξ	H	H	H
25	Н	H	11	11	H	11	ОН	НО	ОН	ОН	ОН	ЮН	НО	ОН	ЮН	НО	НО	НО	ЮН	НО	НО
30	OMe	OMe	ОМе	ОМе	ОМе	OMe	OMe	ОМе	OMe	ОМе	ОМе	OMe	OMe	ОМе	OMe	ОМе	OMe	OMe	OMe	OMe	OMe
	ОМе	OMe	ОМе	OMe	ОМе	OMe	ОМе	ОМе	ОМе	OMe	ОМе	ОМе	ОМе	OMe	OMe	ОМе	ОМе	OMe	OMe	OMe	OMe
	=	=	=	=	Ξ	=	F	-	Œ,	댐	न	<u>-</u>	ഥ	<u> </u>	Ŀ	Œ,	Œ,	Œ	5.	Œ,	(£
35	H	H	Ξ	=	Н	=	H	Ξ	Н	Ξ	=	H	포	H	Ξ	포	H	Ξ	Ξ	田	Æ
	H	Н	=	=	=	=	н	Ξ	Н	Н	Ξ	H	Ξ	H	H	H	H	H	H	田	H
40	=	П	=	=	=	=	H	=	Ξ	Ξ	=	=	Ξ	H	=	王	Ξ	Ξ	Ξ	三	H
	Ξ	=	Ξ	=	포	=	H	=	Ξ	Ξ	Ξ	Ξ	Ξ	H	Ξ	王	H	王	Ή	王	H
45	NMc2	NMe <sub>2</sub>	NMe2	NMe <sub>2</sub>	NMe <sub>2</sub>	NMez	NMe <sub>2</sub>	NMe <sub>2</sub>	NMe <sub>2</sub>	NMez	NMe <sub>2</sub>	NMe <sub>2</sub>	NMe <sub>2</sub>	NMe2	NMe <sub>2</sub>						
50	1-2020	1.202.1	1.2022	1.202.3	1-2024	1.2025	1-2026	1.2027	-2028	.2029	1.2030	1.2031	.2032	-2033	-2034	.2035	.2036	.2037	-2038	.2039	.2040

Table 302

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1.2041	NMe2	Ξ	Ξ	Ξ	Ξ	<u>E</u>	ОМе	ОМе	HO	=	Ξ	Н	СН2ОН	0	-CH2CH=CMe2
1.2042	NMc <sub>2</sub>	田	Ξ	Ξ	Ξ	2-	OMe	ОМе	ОН	Ξ	프	H	СН2ОН	0	-(CH2)2CH=CMe2
1.2043	NMe <sub>2</sub>	=	H	Ξ	Ξ	-	OMe	OMe	НО	Ξ	Ξ	Ξ	СН2ОН	0	-CH2CII=CCl2
1.2044	NMe <sub>2</sub>	Ξ	=	Н	Ξ	~	OMe	OMe	НО	Ξ	Ξ	H	СН2ОН	0	−CH2C≡CMe
1.2045	NMe <sub>2</sub>	=	П	H	н	F	OMe	ОМе	ЮН	11	H	H	СН2ОН	0	-CH <sub>2</sub> C <sub>6</sub> H <sub>4</sub> -4-Me
1.2046	NMe <sub>2</sub>	=	П	Ξ	Ξ	ન	OMe	ОМв	НО	Ξ	Ξ	Н	F	0	-CH2CH=CMe2
1.2047	NMe <sub>2</sub>	Н	Ξ	H	==	F	OMe	OMe	НО	Η	H	H	ų	0	-(CH2)2CII=CMe2
1.2048	NMe <sub>2</sub>	н	H	Н	Н	H	ОМе	OMe	НО	H	Н	H	ᅜ	0	-CH2CH=CCl2
1.2049	NMez	Ξ	Н	H	Н	Ţ.	OMe	OMe	ЮН	Ξ	Н	Н	Ē	0	-CH2C≡CMe
1.2050	NMe <sub>2</sub>	н	H	Н	H	Ŀ	ОМе	ОМе	НО	H	Н	Н	ഥ	0	-CH2C6H4-4-Me
1-2051	COOH	Н	H	11	н	Н	OMe	ОМе	но	Ħ	Н	H	НО	0	$-(CH_2)_2CH = CMe_2$
1.2052	COOH	11	Н	Н	Ξ	н	ОМе	OMe	ЮН	Ξ	Н	Н	НО	0	-CH2CII=CCl2
I-2053	СООН	Н	H	Н	Н	Н	ОМе	ОМе	НО	H	Н	Ξ	НО	0	-CH2C≡CMe
I-2054	Н000	Н	Ξ	Н	Н	Н	ОМе	OMe	НО	Ξ	H	Ξ	ОМв	0	-CH2CH=CMe2
1.2055	11000	H	=	Н	H	Н	ОМе	ОМе	НО	Ξ	H	Ξ	ОМв	0	-(CH2)2CH=CMe2
1.2056	СООН	H	H	Н	Н	Н	OMe	OMe	НО	H	H	H	ОМв	0	-CH2CH=CCl2
1.2057	СООН	Н	Н	Н	H	Н	OMe	ОМе	НО	н	H	H	OMs	0	– CH₂C≡CMe
1.2058	СООН	Н	Н	Н	Ξ	н	ОМе	ОМе	НО	Ξ	Ή	Ħ	OMs	0	-CH2C6H4-4-Me
1-2059	НООО	Н	H	Н	H	Н	ОМе	ОМе	ОН	H	H	Ħ	нооэ	0	- CH2CH=CMe2
I.2060	СООН	Н	Ξ	Н	H	Н	ОМе	ОМе	ОН	Ξ	Ħ	Ξ	соон	0	$-(CH_2)_2CH=CMe_2$
I.2061	Н000	H	Н	H	Н	Н	OMe	OMe	ОН	H	H	H	СООН	0	- CH2CH=CCl2

Table 303

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				Т	Τ				_	Τ			_	_			,	,		,
-CH <sub>2</sub> C≡CM <sub>6</sub>	-CH2C6H4-4-Me	-CH2CII=CMe2	$-(CH_2)_2CH=CMe_2$	-CH2CH=CCl2	-CH2C≡CMe	-CH2C6H4-4-Me	-CH2CH=CMe2	-(CH2)2CH = CMe2	-CH2CH=CCl2	- CH₂C≡CMe	-CH2C6H4-4-Me	-CH2CH=CMe2	-(CH2)2CH=CMe2	-CH2CH=CCl2	- CH2C≡CMe	-CH2C6H4-4-Me	-CH2CH=CMe2	-(CH2)2CH = CMe2	-CH2CH=CCI2	-CH3C≡CMa
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11000	СООН	CH2OH	CH2OH	СН2ОН	СН2ОН	CH <sub>2</sub> OH	F	F	Æ	Œ	দ	НО	НО	ОН	НО	НО	OMs	,OMB	OMs	OMe
=	H	H	Н	H	H	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	н	Ħ
	н	H	Н	Ħ	=	H	H	Н	Н	Н	Н	Н	H	Н	Н	Н	Н	Н	Н	н
	H	Ξ	11	=	Ξ	Η	Н	Н	H	H	Н	Н	Н	H	Н	Н	Н	Н	Н	Н
IIO	ЮН	Ю	ПО	HO	OII	НО	ЮН	ОН	НО	ОН	ОН	соон	соон	соон	соон	соон	соон	соон	соон	СООН
OMe	OMe	OMe	OMe	OMe	OMe	ОМе	ОМе	OMe	OMe	ОМе	OMe	OMe	ОМе	ОМе	OMe	ОМе	OMe	OMe	OMe	OMe
OMe	OMe	OMe.	OMe	ОМе	OMe	OMe	OMe	OMe	OMe	OMe	ОМе	OMe	OMe	OMe	OMe	OMe	OMe	OMe	OMe	OMe
	=	=	=	=	=	H	Н	Η	Ή	Н	H	H	H	Ξ	표	H	H	Ξ	三	H
=	Ξ	=	=	=	Ξ	Ŧ	Н	H	H	H	Н	H	H	Ξ	H	H	Ξ	Ξ	Ξ	出
	=	=	=	=	=	· =	H	H	H	Ξ	H	H	Ή	Ξ	H	H	Ξ	Ξ	Ξ	Н
=	=	=	=	=	=	=	=	Ξ	=	国	H	H	E	=	=	H	H	=	王	Н
	=	Ξ	=		Ξ	Ξ	Ξ	H	H	H	Η	H	H	=	三	Ξ	三	=	三	Н
COOII	C00II	HOOD	COOH	COOII	COOII	C00H	СООН	СООН	СООН	СООН	СООН	СООН	СООН	СООН	СООН	СООН	СООН	соон	СООН	соон
1.2062	1.2063	1-2064	1.2065	1.2066	1.2067	1-2068	1.2069	1.2070	1.2071	1.2072	I.2073	1.2074	1.2075	1.2076	1.2077	1.2078	1.2079	1-2080	1.2081	1.2082

Table 304

1.2084	COOII	Ξ	11	H	Ξ	=	OMe	ОМе	СООН	Ξ	=	Ξ	OMs	0	-CH2C6H4-4-Me
	COOH	Ξ	П	н	Π	=	OMe	ОМе	COOH	Ξ	王	H	соон	0	-CH2CH=CMe2
1.2085	COOH	Ξ	=	Н	П	=	OMe	ОМе	COOH	=	=	王	COOII	0	-(CH <sub>2</sub> ) <sub>2</sub> CH=CMe <sub>2</sub>
1-2086	COOH	=	Ξ		=	=	OMe	OMe	COOII	=	=	H	11000	0	-CH2CH=CCl2
1.2087	COOH	Ξ	Η	Н	Н	Ξ	ОМе	OMe	СООН	Ξ	Ξ	Ξ	СООН	0	-CH2C≡CMe
1.2088	COOH	Ξ	П	11	Ξ	=	OMe	OMe	COOII	=	=	Ξ	COOII	0	-CH2Call4-4-Me
1.2089	СООН	Н	Н	Н	Н	н	ОМе	OMe	СООН	Ξ	H	Н	СН2ОН	0	-CH2CH=CMe2
1.2090	СООН	Н	н	Н	н	H	ОМе	OMe	соон	Н	Ξ	H	СН2ОН	0	-(CH2)2CH=CMe2
1-2091	СООН	Н	н	Н	Н	H	OMe	OMe	соон	Н	Ξ	Н	CH <sub>2</sub> OH	0	-CH2CH=CCl2
1.2092	СООН	Н	H	Н	н	н	ОМе	ОМе	соон	H	프	Н	СН2ОН	0	CH₂C≡CMe
1.2093	СООН	н	Н	Н	Н	H	OMe	OMe	СООН	Н	H	Н	СН2ОН	0	-CH <sub>2</sub> C <sub>6</sub> H <sub>4</sub> -4-Me
1-2094	СООН	Н	Н	H	H	Ξ	OMe	ОМе	СООН	H	H	Н	저	0	-CH2CH=CMe2
I.2095	СООН	H	H	Ξ	Ξ	표	OMe	ОМе	СООН	Н	H	H	দে	0	$-(CH_2)_2CH=CMe_2$
1.2096	соон	Ή	Ξ	Н	Ή	三	OMe	ОМе	соон	H	Ξ	Ξ	Œ,	0	-CH2CH=CCl2
1.2097	СООН	Н	H	H	H	Ξ	OMe	ОМе	СООН	Н	H	H	स	0	-CH2C≡CMe
1-2098	COOH	Ξ	Ξ	н	H	H	OMe	OMe	СООН	Н	H	H	Œ,	0	-CH2C6H4-4-Me
1.2099	соон	Н	H	н	Ή	Ħ	OMe	ОМе	CH <sub>2</sub> OH	Н	Н	Ή	НО	0	-CH2CH=CMe2
1.2100	соон	Н	Η	Ξ	H	Ξ	OMe	ОМе	СН2ОН	н	Н	H	НО	0	-(CH2)2CH=CMe2
1.2101	соон	Н	H	Н	H	H	ОМе	ОМе	CH <sub>2</sub> OH	H	Н	Ξ	НО	0	-CH2CH=CCl2
I.2102	СООН	H	Н	H	H	Ξ	OMe	ОМе	CH <sub>2</sub> OH	H	Н	H	НО	0	-CH2C≡CMe
1.2103	СООН	н	H	H	Н	H	ОМе	ОМе ОМе	СН2ОН	H	Н	H	ЮН	0	-CH2C6H4-4-Me

Table 305

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~	62			Je .	24	62			Je Je		82			<u>e</u>		8			اق	
-CH2CH=CMe2	-(CH2)2CH = CMe2	-CH2CH=CCl2	-CH2C≡CMe	-CH2C6H4-4-Me	-CH2CH=CMe2	$-(CH_2)_2CH=CMe_2$	-CH2CH=CCl2	-CH2C≡CMe	-CH2C6H1-4-Me	-CH2CH=CMe2	$-(CH_2)_2CH=CMe_2$	-CH2CH=CCl2	–CH2C≡CMe	-CH2C6H4-4-Me	-CH2CH=CMe2	-(CH2)2CH = CMe2	-CH2CH=CCl2	-CH2C≡CMe	CH2C6H4-4-Me	-CHoCH=CMe
-			_				_	_			_								_'_	_
0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	٥
OMs	ОМв	ОМв	OMs	ОМв	COOII	СООН	СООН	соон	соон	СН2ОН	СН2ОН	СН2ОН	СН2ОН	СН2ОН	দ	F	F	ম	댼	пo
三	王	Ξ	H	H	Ξ	Н	Н	H	Н	Н	Н	H	Н	Н	Н	Н	Н	Н	Н	Ξ
Ħ	Ŧ	Ξ	프	H	Ξ	Ħ	Н	H	H	Н	H	H	Н	Н	Н	H	Н	Н	Н	н
Ξ	Ξ	=	Ξ	H	Ξ	H	H	Ξ	H	Н	Н	Н	Ή	н	Ξ	Ή	Ή	H	H	н
CH2OH	СН2ОН	CH20H	СН2ОН	СН2ОН	CH2OH	СН2ОН	СН2ОН	СН2ОН	СН2ОН	СН2ОН	СН2ОН	СН2ОН	СН2ОН	СН2ОН	СН2ОН	СН2ОН	СН2ОН	СН2ОН	СН2ОН	Me
OMe	ОМе	OMe	OMe	OMe	OMe	OMe	ОМе	OMe	ОМе	ОМе	ОМе	ОМе	OMe	OMe	OMe	OMe	OMe	OMe	OMe	OMe
OMe	OMe	OMe	OMe	OMe	OMe	OMe	ОМе	ОМе	ОМе	OMe	ОМе	ОМе	ОМе	OMe	OMe	OMe	ОМе	OMe	OMe	OMe
Ξ	=	=	Ξ	=	=	Н	H	Ξ	=	H	Н	H	Н	Н	프	H	Н	Ξ	H	Н
Ħ	Ħ	=	=	H	=	H	H	Ξ	П	Н	H	Ξ	H	Н	H	H	H	H	H	н
=	Ŧ	=	=	H	=	.=	H	H	H	Н	Н	H	H	Н	Ξ	H	H	Ή	Ή	Н
=	Ξ	=	Ξ	=	=	Ξ	Ξ	=	=	=	Ή	Ξ	Ξ	H	Ξ	H	Ξ	Ξ	H	H
=	Н	Ξ	Ξ	Н	=	H	Ħ	Ξ	Ξ	Н	H	H	Н	Н	н	Н	H	н	Н	H
COOH	СООН	COOH	COOH	COOII	COOII	СООН	COOH	11000	11000	11000	СООН	COOH	НООО	СООН	11000	СООН	НООО	Н000	СООН	СООН
1.2104	1.2105	1.2106	1.2107	1.2108	1.2109	1.2110	1.2111	1.2112	1.2113	1.2114	1.2115	1.2116	I.2117	1.2118	1.2119	1.2120	1.2121	1.2122	1.2123	1.2124

Table 306

1.2125	COOH	Н	=	11		Ξ	OMe	OMe	Me	Ξ	H		НО	0	$-(CH_2)_2CH = CMe_2$
1.2126	11000	11	н	Н	н	Ξ	ОМе	OMe	Me	Ξ	н	Ξ	НО	0	-CH2CH=CCl2
1.2127	11000	11	H	Н	H	=	ОМе	ОМе	Me	H	H	H	НО	0	- CH2C≡CMe
1.2128	11002	н	H	H	H	Ξ	ОМе	OMe	Me	Н	H	Ξ	НО	0	-CH2C6H4-4-Me
1.2129	11000	н	=	н	11	=	OMe	OMe	Me	Ξ	H	Ξ	ОМв	0	-CH2CH=CMe2
1.2130	11000	Ξ	=	=	=	=	OMe	OMe	Me	Ξ	=	王	ОМв	0	$-(CH_2)_2CH=CMe_2$
1.2131	НООЭ	Н	=	Н	Н	Ш	ОМе	ОМе	Me	II	H	Ξ	ОМв	0	-CH2CH=CCl2
1.2132	11000	Н	Н	Н	н	Ή	ОМе	ОМе	Me	Н	Н	H	ОМв	0	CH2C≡CMe
1.2133	H000	Н	Н	Н	н	н	OMe	OMe	Me	H	Н	H	ОМв	0	-CH2C6H4-4-Me
1.2134	COOH	Н	Н	H	Н	н	ОМе	OMe	Me	H	Н	H	соон	0	-CH <sub>2</sub> CH=CMe <sub>2</sub>
1.2135	НООО	Н	Н	Н	Н	н	ОМе	OMe	Me	Н	Н	H	СООН	0	-(CH2)2CH=CMe2
1.2136	HOOD	Н	Н	Н	Н	Н	ОМе	OMe	Me	Н	Н	Ξ	Н000	0	-CH2CH=CCl2
1.2137	11000	Н	H	Н	Н	Ξ	OMe	ОМе	Me	н	Н	Ξ	соон	0	- CH2C≡CMe
1.2138	COOH	Н	Н	Н	Н	王	OMe	ОМе	Me	H	Н	Ξ	СООН	0	-CH <sub>2</sub> C <sub>6</sub> H <sub>4</sub> -4-Me
1.2139	HOOD	Н	Н	н	н	Н	OMe	ОМе	Me	Н	Н	Ξ	СН2ОН	0	-CH2CH=CMe2
1.2140	COOH	н	Н	Н	Н	Н	OMe	OMe	Me	Н	Н	표	СН2ОН	0	$-(CH_2)_2CH = CMe_2$
1.2141	СООН	н	Н	Н	Н	н	OMe	OMe	Me	н	Н	Ξ	СН2ОН	0	-CH2CH=CCl2
1.2142	11000	H	H	Н	H	Ξ	OMe	ОМе	Me	H	Н	Ξ	СН2ОН	0	- CH2C≡CMe
1.2143	СООН	н	Н	Н	Н	н	OMe	ОМе	Me	H	Н	Ξ	СН2ОН	0	-CH <sub>2</sub> C <sub>6</sub> H <sub>4</sub> -4-Me
1.2144	СООН	H	Н	Н	Н	H	OMe	OMe	Me	H	H	Ξ	Œ	0	-CH2CH=CMe2
1.2145	нооэ	Н	Н	H	Ή	H	OMe	OMe	Me	H	H	H	Œ,	0	$-(CH_2)_2CH=CMe_2$

Table 307

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				1				_		_						_				
-CH <sub>2</sub> CH = CCl <sub>2</sub>	-CII,C≡CMe	-CH2C6H4-4-Me	-CH2CH=CMe2	$-(CH_2)_2CH = CMe_2$	-CH2CH=CCh2	CH2C≡CMe	-CH2C6H4-4-Me	-CH2CH=CMe2	-(CH <sub>2</sub> ) <sub>2</sub> CH=CMe <sub>2</sub>	-CH2CH=CCl2	CH2C≒CMe	-CH2C6H4-4-Me	-CH2CH=CMe2	- (CH2)2CH=CMe2	-CH2CH=CC12	- CH2C≡CMe	-CH2C6H4-4-Me	-CH2CH=CMe2	- (CH <sub>2</sub> ) <sub>2</sub> CH=CMe <sub>2</sub>	-CH2CH=CCl2
0	၁	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
íz.	F	ዝ	ОН	НО	OH	НО	но	ОМв	OMs	OMB	8MO	оМв	СООН	нооэ	СООН	соон	СООН	СН <sub>2</sub> ОН	CH <sub>2</sub> OH	СН2ОН
=	Ξ	H	Ξ	Н	H	Н	H	Ξ	Н	H	Н	Н	Н	H	Н	Н	Н	Н	Н	Н
=	Ξ	H	Ħ	Н	Ξ	Н	H	표	H	Н	H	H	H	H	Н	Н	Н	Н	Н	H
Ξ	=	Ξ	Ξ	H	=	H	H	H	Н	Н	Н	H	Н	Н	H	Н	Н	Н	H	H
Me	Me	Ме	Н	Н	=	Н	H	H	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н.	Н	H
OMe	OMe	OMe	ОМе	ОМе	OMe	OMe	ОМе	ОМе	OMe	ОМе	ОМе	ОМе	OMe	OMe	ОМе	OMe	OMe	OMe	OMe	OMe
ОМе	OMe	OMe	ОМе	ОМе	OMe	OMe	ОМе	ОМе	ОМе	OMe	OMe	ОМе	ОМе	OMe	OMe	OMe	OMe	ОМе	OMe	ОМе
Ξ	Ξ	Ξ	=	Ξ	=	=	三	Ξ	Ξ	Ξ	Ξ	Ξ	H	H	H	H	Ή	H	H	Н
Ξ	=	=	=	=	=	Ξ	H	프	H	H	H	H	H	H	H	H	Ξ	H	H	H
Ξ	=	Ξ	=	포	=	Ξ	H	H	Н	H	H	H	H	Ξ	H	Ξ	田	H	H	Н
=	=	Ξ	=	Ξ	=	H	H	=	H	Ξ	H	Ξ	H	Ξ	H	E	H	王	田	Н
=	=	=	Ξ	=	=	Ξ	H	H	Ξ	H	H	H	H	H	Ξ	프	H	王	E	Н
COOH	COOH	11000	11000	HOOD	HOON	COOII	СООН	СООН	СООН	СООН	СООН	COOH	СООН	Н000	нооэ	СООН	Н000	СООН	СООН	СООН
1.2146	1.21.17	1.2148	1.2149	1.2150	1-2151	1.2152	I-2153	1.2154	1.2155	1.2156	1.2157	1.2158	1.2159	1.2160	1.2161	1.2162	1.2163	I.2164	1.2165	I.2166

Table 308

-CH <sub>2</sub> C≡CMe	-CH2C6H4-4-Me	-CH2CH=CMe2	$-(CH_2)_2CH=CMe_2$	-CH2CH=CCl2	-CH₂C≡CMe	-CH2C6H4-4-Me	-CH2CH=CMe2	-(CH <sub>2</sub> ) <sub>2</sub> CH=CMe <sub>2</sub>	-CH2CH=CCl2	CH2C≡CMe	-CH2Cell4-4-Me	-CH2CH=CMe2	$-(CH_2)_2CH = CMe_2$	-CH2CH=CCl2	-CH2C≡CMe	-CH2C6H4-4-Me	-CH2CH=CMe2	- (CH <sub>2</sub> ) <sub>2</sub> CH=CMe <sub>2</sub>	-CH2CH=CCl2	– CH₂C≡CMe
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
СН2ОН	снұон	R	(Z.	સ	F	F	ЮН	ОН	НО	НО	НО	OMs	OMs	OMs	ОМв	OMs	нооэ	НООО	нооэ	СООН
Ξ	H	Ξ	H	H	H	н	H	Ξ	H	H	H	н	Ξ	Ħ	Ή	Ξ	Ξ	田	Ξ	Ξ
Ξ	Н	H	H	H	Ξ	H	H	Ξ	Н	Ξ	H	H	H	Ξ	H	H	Ξ	三	Ξ	H
=	=	Ξ	H	Ξ	=	Ξ	H	Ξ	Ξ	Ξ	=	=	Ξ	Ξ	Ħ	田	H	Ξ	Ξ	Н
H	Н	Н	Н	Н	=	Н	ОН	НО	ОН	НО	НО	HO	НО	НО	НО	ЮН	ЮН	НО	ОН	ЮН
OMe	OMe	OMe	OMe	OMe	ОМе	OMe	OMe	OMe	ОМе	ОМе	OMe	OMe	ОМе	ОМе	OMe	ОМе	ОМе	OMe	OMe	ОМе
OMe	ОМе	ОМе	ОМе	ОМе	OMe	ОМе	OMe	ОМе	OMe	ОМе	ОМе	OMe	OMe	ОМе	OMe	OMe	OMe	OMe	OMe	OMe
=	H	Н	Н	H	1	H	Ŀ	5	F	댼	F	=	F	F	<u>C-</u> ,	F	댼	F	Œ.	F
H	П	Н	H	Н	11	H	Н	Н	Н	Н	Н	Ξ	H	Н	H	Н	Н	H	Н	Н
H	Н	Н	Н	Н	Н	Н	Н	н	Н	Н	Н	Н	H	H	٠Н	Н	Н	Н	Н	Н
H	Η	Н	H	H	Н	Н	Н	Ξ	Н	Н	H	=	Н	H	H	Н	Н	Н	Н	Н
11	H	Н	Н	H	11	Н	Н	11	Н	Н	н	11	Н	Н	Н	н	Н	н	Н	Н
COOH	11000	11000	HOOD	H002	11000	HOOD	H000	HOOD	HOOD	H000	COOH	COOII	СООН	СООН	COOH	СООН	H000	СООН	СООН	СООН
1.2167	1.2168	1.2169	1.2170	1.2171	1.2172	1.2173	1.2174	1.2175	1.2176	1.2177	1.2178	1.2179	I-2180	1.2181	1.2182	1.2183	I.2184	1.2185	I.2186	1.2187

Table 309

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-CH2C6H4-4-Me	-CH2CH=CMe2	-(CH2)2CH = CMe2	-CH2CH=CCl2	CH₂C≡CMe	-CH2C6H4-4-Me	$-CH_2CH = CM_{\theta_2}$	-(CH2)2CH=CMe2	-CH2CH=CCl2	-CH2C≡CMe	-CH2C6H4-4-Me	$-(CH_2)_2CH=CM_{\Theta_2}$	$-(CH_2)_2CH = CM_{\theta_2}$	$-(CH_2)_2CH = CMe_2$	-(CH2)2CH=CMe2	$-(CH_2)_2CH=CMe_2$	-CH2CH=CMe2	-CH2C6H6	-CH2CH=CMe2	- CH2C6H8	-CH2C6Hs
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
С00Н	СН2ОН	СН2ОН	СН2ОН	CH2OH	СН2ОН	H	F	F	F	F	ОМв	ОМв	OMs	ОМв	ОМв	ОН	ОН	NH2	NH2	НО
三	=	Ή	н	Н	Н	Н	Н	Н	Н	H	Н	H	Н	Н	H	H	Н	H	Н	Н
Ξ	=	Ħ	Ξ	H	H	H	H	Н	H	Н	Н	Н	Н	Н	==	Н	Н	H	Н	Н
=	=	Ħ	H	H	11	Н	Н	Н	Н	Н	Н	H	NO <sub>2</sub>	Н	=	Н	Н	н	Н	H
OH	OH	OH	ОН	OH	Ш	НО	ОН	ОН	ОН	ОН	Н	Ξ	Н	Н	Ξ	ОМв	ОМв	ОМв	ОМв	НО
ОМе	OMe	OMe	OMe	ОМе	ОМе	ОМе	ОМе	ОМе	ОМе	ОМе	ОМе	ОМе	OMe	OMe	OMe	ОМе	ОМе	ОМе	OMe	OEt
OMe	ОМе	ОМе	ОМе	ОМе	OMe	OMe	ОМе	ОМе	ОМе	ОМе	ОМе	ОМе	OMe	OMe	OMe	OMe	ОМе	ОМе	OMe	ОМе
5-	~	<u>:-</u>	Œ.	<u></u>	۳.	F	Ή	Œ	Œ,	Œ	Ή	=	H	H	=	Ξ	Ξ	Ξ	Ξ	Н
	=	=	Ξ	Ξ	=	Н	H	Н	Н	H	Ξ	=	H	Ξ	=	王	Ξ	H	H	H
	=	=	Ξ	=	Ξ	11.	Н	Н	Н	H	H	=	H	Н	=	H	Н	H	H	Н
	=	=	Ξ	=	=	=	H	H	H	H	Ξ	=	프	H	=	=	Ξ	H	Ξ	Н
	=	=	Ξ	Н	Н	Η	Н	Н	Н	Н	II	NO2	H	Ξ	CN	Η	H	H	Ξ	Н
COOH	HOOD	H003	СООН	COOH	HOOO	11000	НООО	СООН	СООН	СООН	NO <sub>2</sub>	ОМв	OMs	CN	ОМв	Ю	НО	ЮН	НО	НО
1.2188	1.2189	1-2190	1.2191	1.2192	1.2193	1.2194	1.2195	1.2196	1.2197	1.2198	1.2199	1.2200	1.2201	1.2202	1.2203	1-2204	1.2205	1.2206	1.2207	1.2208

Table 310

Table 311

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-CH2CH=CMe2	-CH2C6H6	-CH2CH=CMe2	-CH <sub>2</sub> CH=CMe <sub>2</sub>	-CH2C6H6	-CH <sub>2</sub> CH=CMe <sub>2</sub>	-CH2C6H6	-CH2CH=CMe2	-CH2C6Hs	-CH2CH=CMe2	-CH2C6H6										
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NH2	NH2	но	NH2	NH2	ОП	ОН	NH2	NH2	НО	ЮН	NH2	NH2	ЮН	ОН	NH2	NH2	ОН	ОН	NH2	NH2
Н	н	Н	H	Η	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	H	Ή,	Н	Н
Н	Н	Н	н	Н	П	Н	H	Н	Н	Н	Н	Н	H	Н	Н	Н	Н	Н	Н	H
H	Н	II	H	H	11	11	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	н
Н	11	NH2	NII	NH2	OH	НО	OH	ОН	ОМв	ОМв	OMs	OMs	ОН	ОН	ОН	ОН	Н	Н	Н	H
Me	Me	OMe	OMe	OMe	ОМе	ОМе	OMe	ОМе	ОМе	ОМе	ОМе	ОМе	OEt	OEt	OEt	OEt	Me	Me	Me	Me
Me	Me	OMe	OMe	OMe	ОМе	ОМе	ОМе	ОМе	ОМе	ОМе	ОМе	ОМе	ОМе	ОМе	ОМе	ОМе	Me	Me	Me	Me
H	Ξ	Η	==	H	Н	Н	н	Н	Н	Н	Н	Η	Н	Н	Н	Н	Н	Н	Н	Н
11	=	=	=	H	=	н	H	Н	Н	н	Н	Ή	Н	Н	Н	Н	Н	Н	Н	Н
11	Н	H	11	Н	11	H	П	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н
11	Η	Ξ	-11	Н	П	п	=	н	H	=	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н
=	11	Ε	H	11	=	П	Ξ	Н	Н	Н	H	H	Н	Н	Н	Н	Н	Н	Н	Н
OMs	OMs	OMs	OMs	OMs	OMs	OMs	OMs	OMs	$CF_3$	$CF_3$	$CF_3$	$CF_3$	CF3	$CF_3$	CF3	$CF_3$	$CF_3$	CF3	CF3	CF3
1.2230	1.2231	1-2232	1.2233	1.2234	1.2235	1.2236	1.2237	1.2238	I.2239	1.2240	1.2241	1.2242	I-2243	1-2244	1.2245	1.2246	1.2247	1.2248	1-2249	1.2250

Table 312

- CH2CH = CMe2	-CH2C6H6	-CH2CH=CMe2	-CH2Cells	-CH2CH=CMe2	-CH2CoHs	-CH2CH=CMe2	-CH2C6Hs	-CH2CH=CMe2	-CH2C6H6	-CH2CH=CMe2	-CH2C6H6	-CH2CH=CMe2	-CH2C6H6	-CH2CH=CMe2	-CH2C6H6	-CH1CH=CMe2	-CH2C6H6	-CH2CH=CMe2	CH2CeHs	-CH <sub>2</sub> CH=CMe <sub>2</sub>
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
НО	ОН	NH2	NH2	ОН	НО	NH2	NH2	ОН	НО	NHs	NHg	НО	ОН	NH2	NH2	НО	ОН	NH2	NH2	НО
H	==	Ξ	. =	Ξ	=	Ξ	国	三	Ξ	Ξ	Ξ	Ξ	Ŧ	Н	н	표	Н	H	H	H
H	Н	Ŧ	Ξ	Ξ	=	Ξ	H	Ή	H	H	Ξ	н	Ή	н	Н	Ή	Н	H	Ξ	H
Н	Н	Н	н	Ξ	Η	Ξ	H	н	Н	H	H	Н	H	Н	Н	H	н	H	Ξ	H
ZIIZ	NH2	NII2	NH2	НО	IIO	OH	НО	OMB	ОМв	ОМв	OMs	ОН	НО	ОН	ОН	н	п	H	H	NH3
OMe	OMe	OMe	ОМе	ОМе	OMe	ОМе	OMe	OMe	ОМе	ОМе	OMe	OEt	OEt	OEt	OEt	Me	Me	Me	Me	OMe
OMe	OMe	OMe	OMe	OMe	OMe	ОМе	OMe	OMe	ОМе	ОМе	OMe	OMe	ОМе	ОМе	OMe	Me	Me	Me	Me	OMe
=	Ξ	=	Ξ	H	=	П	Н	Н	H	Н	Н	Н	Н	Н	Ξ	Н	П	Н	Н	H
=	=	=	=	Ξ	=	Н	Н	H	Ξ	Н	H	Н	Н	Н	Ξ	н	Н	Н	Ħ	Н
=	=	Ξ	=	=	=	Н	Н	H	Ξ	Н	Н	Н	H	н	Ξ	H	Ξ	Н	Н	н
=	=	=	Ξ	=	=	Ξ	H	Ξ	=	I	Н	Ξ	Ξ	H	H	H	=	Ħ	Ħ	Ξ
	=	Ξ	=	Ξ	=	ш	Н	Ħ	Ŧ	н	н	H	Ξ	=	H	H	=	Ħ	н	Н
CF3	CF.	CF3	CF3	CF <sub>3</sub>	CF3	CF3	CF <sub>3</sub>	NH3.	NH2	NH2	NH2	ZIIZ	NH2	ZHZ.	NH.	NH2	Z Z	NH2	NH2	NH2
1.2251	1.2252	1.2253	1-2254	1.2255	1.2256	1.2257	1-2258	1.2259	1.2260	1.2261	1.2262	1.2263	1.2264	1.2265	1.2266	1.2267	1.2268	1.2269	1.2270	1.2271

Table 313

	- 01																			
-CH2C6H8	-CH2CH=CMe2	-CH2CaHs	-CH2CH=CMe2	-CH2C6H6	-CII2CH=CMe2	-CH2C6H6	·CH2CH=CMe2	-(CH <sub>2</sub> ) <sub>2</sub> CHMe <sub>2</sub>	Me	·CH2CH=CMe2	-CH2CH=CCl2	-CH2CH=CMe2	-(CH <sub>2</sub> ) <sub>2</sub> CHMe <sub>2</sub>	Ме	-CH2CH=CMe2	·CH2CH=CCl2	·CH2CH=CMe2	-(CH <sub>2</sub> ) <sub>2</sub> CHMe <sub>2</sub>	Me	CH,CH=CMe
0	0	0	0	0	0	0	NH	NH	NMe	0	0	NH	NH	NMe	0	0	NH	NH	NMe	C
НО	NH2	NH.	НО	OH	NH2	NH2	OMe	ОМе	ОМе	OMe	ОМе	Н	Н	н	Н	H	OEt	OEt	OEt	ORt
=	H	Н	Н	Н	H	Н	Н	Н	Н	Н	Н	Œ	ſz,	뚀	দ	Œ,	Н	Н	Н	I
H	Н	н	Н	Ξ	=	H	H	Ή	H	Н	Н	H	H	H	H	Ħ	Н	Н	Н	7
=	H	Н	Н	=	=	=	Н	Ξ	H	Н	н	H	Н	Ħ	H	H	H	Н	Н	
ZIN Z	NH2	NH2	ОН	Ю	ОН	IIO	H	H	Н	Н	H	Н	H	н	H	Н	Н	Н	Н	Ξ
OMe	OMe	ОМе	ОМе	OMe	OMe	OMe	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Ā
OMe	ОМе	ОМе	ОМе	OMe	OMe	OMe	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	X
=	H	Н	11	Ξ	Ξ	=	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me
=	11	H	П	Η	H	=	H	=	Ξ	H	H	田	Н	H	Ξ	H	Ξ	Н	H	H
Ξ	11	Н	11	11	=	Ξ	Η	Ξ	H	Н	H	Η	H	Ξ	H	Η	Ξ	Н	H	Ħ
=	Ξ	H	Ξ	Ξ	=	Ξ	ഥ	Œ	<u>[</u> 2,	Œ	Ŀ	드	Ţ	Œ	댼	F	Œ,	F	댼	Œ
=	Ξ	Ξ	H	=	Ξ	Ξ	Ξ	Ξ	픠	Ξ	Ξ	三	Ξ	Η	H	Ξ	Ξ	Н	Н	Ξ
NII2	NII.	NH <sub>2</sub>	NII.	ZIZ	~IZ	NI <sub>2</sub>	·NHCH2CH=CMe2	-NHCH2CH=CMe2	.NHCH2CH=CMe2	·NHCH2CH=CMe2	-NHCH2CH=CMe2	-NHCII2CH=CMe2	-NHCH2CH=CMe2	.NHCH2CH=CMe2	.NHCH2CH≈CMe2	.NHCH2CH=CMe2	·NHCH2CH=CMe2	·NHCH2CH=CMe2	·NHCH2CH=CMe2	.NHCH,CH=CMe,
01	:	7	5	ေ	~	<b>∞</b>	9	0		2	8	_	10	(0)	~	- 00	6			

Table 314

·CH2CH=CCl2	-CH2CH=CMe2	-(CH <sub>2</sub> ) <sub>2</sub> CHMe <sub>2</sub>	Me	-CH2CH=CMe2	.CH2CH=CCl2	-CH2CH=CMe2	-(CH <sub>2</sub> ) <sub>2</sub> CHMe <sub>2</sub>	Me	.CH2CH=CMe2	.CH2CH=CCl2	.CH2CH=CMe2	-(CH2)2CHMe2	Me	-CH2CH=CMe2	-CH2CH=CCl2	-CH2CH=CMe2	-(CH <sub>2</sub> ) <sub>2</sub> CHMe <sub>2</sub>	Me	-CH2CH=CMe2	.CH2CH=CCl2
0	HN	HN	NMe	0	0	HN	HN	NMe	0	0	HN	NH	NMe	0	0	HN	HN	NMe	0	0
OEt	ОМе	ОМе	ОМе	ОМе	OMe	Н	Н	H	Н	Н	OEt	OEt	OEt	OEt	OEt	ОМе	ОМе	OMe	OMe	OMe
H	Н	Н	Н	H	Н	Ā	F	F	Œ	Ŀ	H	Н	H	H	н	H	H	Н	H	H
H	Н	H	·H	н	=	H	H	H	Н	H	H	H	H	н	H	H	н	H	H	H
Ε	Н	H	Н	Ξ	=	Н	Ξ	Η	н	H	Ξ	Н	H	H	H	H	H	Н	Н	Н
Н.	НО	OH	ЮН	ЮН	HO	ОН	НО	ОН	ОН	ОН	OII	ОН	НО	ОН	НО	НО	НО	НО	ОН	ЮН
Me	ОМе	OMe	ОМе	OMe	ОМе	OMe	OMe	OMe	OMe	ОМе	ОМе	ОМе	ОМе	ОМе	OMe	Me	Me	Me	Me	Me
Me	Me	·Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	H	н	Н	Н	H
Me	Н	н	Н	Ξ	=	н	н	Н	Н	Н	Н	Н	н	Н	Η	Me	Me	Me	Me	Me
Ξ	=	11	Н	H	=	Н	н	н	Н	Н	11	Н	Н	Н	Ξ	Н	H	H	Ξ	H
=	Н	Н	Н	H	11	Н	Н	Н	Н	Н	H	Н	Н	Н	Н	H	Н	H	Н	H
<u>-</u>	न	F	Ŗ	A	મ	Œ	F	Ŀ	Ą	F	ત	F	F	F	F	F	Ē	F.	स	Œ,
Ξ	Ξ	Н	Н	H	11	Н	П	Н	H	Н	н	Н	H	Н	H	Н	H	Н	Н	H
-NHCH2CH=CMe2	-NIICHZCH=CMe2	.NHCH2CH=CMe2	.NHCH2CH=CMe2	.NHCH2CH=CMe2	-NIICIII2CII=C:Me2	.NHCH2CH=CMe2	-NHCH2CH=CMe2	.NHCH2CH=CMe2	.NHCH2CH=CMe2	-NHCH2CH=CMe2	.NHCH2CH=CMe2	.NHCH,CH=CMe2	-NHCH2CH=CMe2	-NHCII2CH=CMe2	-NHCH2CH=CMe2	-NHCH2CH=CMe2	-NHCH2CH=CMe2	-NHCH2CH=CMe2	.NHCH2CH=CMe2	.NHCH2CH=CMe2
1-2293	1.2294	1.2295	1.2296	1.2297	1.2298	1.2299	1-2300	1.2301	1.2302	1-2303	1-2304	1-2305	1.2306	1-2307	1.2308	1-2309	I-2330	1-2331	1.2332	I.2333

-CH2CH=CCl2 -CH2CH=CMe2

OH

H OEt

Ξ

H

二二二

Me Me

Me Me

Me Me

H

HH

1.2352 I.2353

1-2361

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-NHCH2CH=CMe2 -NHCH2CH=CMe2

I-2354

Table 315

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Man	Me <sub>2</sub>		Mez	Z C	Mez	Mez		Me <sub>2</sub>	C]2	Me <sub>2</sub>	Mez		Mez	Clz	Mez	Vez		Mez	-
"CH"UH"UM"	-CH2/CH=CMe2 -(CH2)2CHMe2	Me	-CH2CH=CMe2	.CH2CH=CCl2	-CH2CH=CMe2	·(CH2)2CHMe2	Me	-CH2CH=CMe2	-CH2CH=CCl2	-CH2CH=CMe2	·(CH <sub>2</sub> ) <sub>2</sub> CHMe <sub>2</sub>	Me	-CH2CH=CMe2	.CH2CH=CCl2	-CH2CH=CMe2	-(CH2)2CHMe2	Me	.CH2CH=CMe2	
H	NH	NMe	0	0	HN	NH	NMe	0	0	HN	HN	NMe	0	0	HN	HN	NMe	0	
Ξ	H	H	H	Н	OEt	OEt	OEt	OEt	OEt	ОМе	OMe	OMe	ОМе	OMe	Н	Н	Н	Н	
£	ri (ri	F	Œ,	£,	Ξ	Н	Ξ	Н	H	H	H	H	H	H	Ŀ	Œ,	Œ	Ŀ	-
=	EE	Н	H	Н	Ή	Н	Н	Н	H	Н	Н	Н	Н	Н	Н	Н	Н	H	_
11	EE	H	H	H	H	Н	H	H	=	Н	Н	Н	Н	Н	Н	Н	Н	H	_
HO	OII	OH	ОН	ЮН	OH	ОН	ОН	ОН	ОН	Me	Me	Me	Me	Me	Me	Me	Me	Me	
Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	
=	H	H	Н	H	Η	Н	Н	Н	Н	Me	Me	Me	Me	Me	Me	Me	Me	Me	_
M	Me	Me	Me	Me	Me	Me	Me	Me	Me	Н	Н	H	H	Н	H	н	H	Ξ	_
Ξ		Ξ	王	포	=	田	Ξ	Ή	Ξ	Н	Н	H	H	Н	H	Н	н	H	
Ξ	= =	Ξ	Ξ	Ξ	=	王	三	프	王	프	Ξ	Ξ	Ξ	Ξ	Ή	Ξ	Ξ	Н	
-	-	<u>-</u>	도	[Z.	-	ᄄ	드	<u>[24</u>	Œ,	Œ,	Œ,	-	드	£.	2	[24	Œ,	Ŀ	
E	= =	Ξ	픠	Ξ	=	三	프	三	Ξ	픠	프	픠	Ξ	Ξ	Η	Ξ	Ξ	三	_
NHOH!!!!!	NIICHECHECMEZ	NHCH2CII=CMe2	.NHCH2CH=CMe2	.NHCH2CH=CMe2	-NHCH2CII=CMe2	.NHCH2CH=CMe2	.NHCH2CH=CMe2	-NHCH2CH=CMe2	-NHCH2CII=CMe2	-NHCH2CH=CMe2	.NHCH2CH=CMe2	.NIICH2CH=CMe2	·NHCH2CII=CMe2	-NHCH2CH=CMe2	.NHCH2CH=CMe2	.NHCH2CH=CMe2	.NHCH2CII=CMe2	-NHCH2CH=CMe2	
<u> </u>	<u> </u>								_'										

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1-2334 1-2336 1-2337 1-2338 1-2339 1-2330 1-2340 1.2342 1.2343 1.2344 1.2345 1.2346

1-2341

I.2348 I.2349 I.2350

1-2347

Table 316

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$\Box$					T	Ī									T		П			
-(CH2)2CHMe2	Me	-CH2CH=CMe2	-CH2CH=CCI2	-CH2CH=CMe2	-(CH2)zCHMe2	Me	-CH2CH=CMe2	.CH2CH=CCl2	-CH2CH=CMe2	·(CH2)2CHMe2	Me	-CH2CH=CMe2	-CH2CH=CCl2	-CH2CH=CMe2	-(CH <sub>2</sub> ) <sub>2</sub> CHMe <sub>2</sub>	Ме	-CH2CH=CMe2	-CH2CH=CCl2	-CH2CH=CMe2	·(CH2)2CHMe2
HN	NMe	0	0	NH	HN	NMe	0	0	NH	HN	NMe	0	0	HN	HN	NMe	0	0	HN	HN
OEt	OEt	OEt	OEt	OMe	OMe	OMe	ОМе	ОМе	Н	H	Н	H	н	OEt	OEt	OEt	OEt	OEt	ОМе	OMe
H	Ή	н	н	H	H	Н	Н	Н	Ŀ	G.	F	Ŀ	E4	Н	Ξ	Н	H	н	H	Ξ
F	H	Н	Н	Н	H	Ξ	Н	Н	Н	Н	н	Н	Н	H	H	H	н	Н	H	Н
=	11	Н	H	Н	Н	H	Н	Н	Н	Н	H	Η	Н	Н	Н	Н	Н	Н	Н	Н
Mc	Me	Me	Me	OH	OH	ЮН	ОН	НО	ОН	НО	ОН	HO	НО	ЮН	НО	НО	НО	ОН	Н	Н
Me	Me	Me	Me	OEt	OEt	OEt	OEt	OEt	OEt	OEt	OEt	OEt	OEt	OEt	OEt	OEt	OEt	OEt	Me	Me
Me	Me	Me	Me	OMe	OMe	OMe	OMe	OMe	ОМе	OMe	OMe	OMe	ОМе	OMe	OMe	ОМе	ОМе	ОМе	Me	Me
Ξ	н	11	Η	П	=	H	Н	Н	H	Н	Н	11	Н	Н	Н	н	Н	Н	Me	Me
=	П	Н	Н	П	=	н	Н	Н	Н	Н	H	Н	Н	H	Н	Н	Н	Н	Н	H
=	II	H	H	Н	=	H	Н	Н	Н	Н	Ħ	=	Н	Н	Н	Н	Н	Н	Н	Ħ
<u>-</u>	F	J	F	F	ક	Ę	F	F	F	F	स	F	F	H	Œ	F	F	F	F	Ę
=	Ξ	н	Н	Н	н	Н	Н	Н	Н	Н	Н	П	H	Н	Н	Н	H	Н	Н	H
-NHCH2CH=CMe2	-NHCH2CH=CMez	-NHCH2CH=CMe2	-NHCH2CH=CMe2			-NHCH2CH=CMe2	.NHCH2CH=CMe2	-NHCH2CH=CMe2	.NHCH2CH=CMe2	.NHCH2CH=CMe2		L			.NHCH2CH=CMe2	-NHCH2CH=CMe2	.NHCH2CH=CMe2	.NHCH2CH=CMe2	· NH2	.NH.
1.2355	1.2356	1-2357	1-2358	1.2359	1-2360	1.2361	1.2362	1.2363	1.2364	1.2365	1.2366	1.2367	1-2368	I.2369	1.2370	1.2371	1.2372	1.2373	1.2374	1.9375

-CH2CH=CMe2 ·(CH2)2CHMe2

HN

ОН

Me OMe OMe ОМе

Me

I

H Œ,

·NH2 ·NH2 ·NH2

1.2396

1-2392 1.2393 1.2394

1.2391

NMe H

H

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Ю ОН

Table 317

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NII;	_																			_
		Me	-CH2CH=CMe2	.CH2CH=CCl2	-CH2CH=CMe2	·(CH2)2CHMe2	Me	-CH2CH=CMe2	.CH2CH=CCl2	-CH2CH=CMe2	·(CH <sub>2</sub> ) <sub>2</sub> CHMe <sub>2</sub>	Me	-CH2CH=CMe2	·CH2CH=CCl2	-CH2CH=CMe2	-(CH <sub>2</sub> ) <sub>2</sub> CHMe <sub>2</sub>	Me	-CH2CH=CMe2	-CH2CH=CCl2	
		NMe	0	0	HN	HN	NMe	0	0	H	NH	NMe	0	0	HN	HN	NMe	0	0	
		ОМе	OMe	OMe	Н	Н	=	Н	Н	OEt	OEt	OEt	OEt	OEt	OMe	ОМе	OMe	OMe	OMe	
		н	Ξ	H	Œ,	E,	2	G.	Œ,	H	=	H	Ξ	Ξ	H	H	H	Ξ	H	-
		Н	Ξ	H	H	H	=	H	H	H	H	Н	H	Ξ	田	H	H	Ξ	Ξ	_
	,	н	=	Ξ	Н	Ξ	Ξ	H	H	Н	H	Н	н	Ħ	Н	Н	н	H	Н	_
		П	11	H	11	Н	11	Н	Н	Н	Ξ	Ħ	Н	Ξ	НО	НО	НО	НО	ОН	
		Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	OMe	OMe	OMe	OMe	ОМе	
		Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	
		Me	Me	Me	Me	Me	Mc	Me	Me	Me	Me	Me	Me	Me	Н	Н	Н	Н	Н	
		H	Ξ	Н	Н	Н	=	Ξ	Н	П	П	Н	Н	Н	Н	Н	Н	Н	Н	
		H	11	Н	Н	Н	Ξ	Н	Н	H	H	H	Н	Н	H	Н	Н	H	H	
		-	드		24	<u>E</u> ,	=	6		F	~				대			ন		L
2.11N. 2.		,=	Ξ	Ξ	ェ	=	=	Ξ	Ξ	Ξ	=	H	H	II	Н	H	H	H	H	_
		-IN-	FIN.	.HN.	.NN.	ZIN.	:IN:	EZ.	.NIV.	ZIIZ.	"IIN-	.NH2	.NH2	FIN.	.NH2	.NH2	-NH2	.NH2	.NHz	

1.2382 I.2383 1.2384 1.2385 I-2386 1.2387 1.2388 1-2389 I-2390

1-2:381

1.230

1-2378 I-2379

1-2377

Table 318

Г		—т			Т	Т	1	Т	Т	Т		Т		1	$\neg$	Т	$\neg$	Т	Т	$\neg$	$\neg$
	-CH2CH=CMe2	.CH2CH=CCl2	.CH2CH=CMe2	-(CH <sub>2</sub> ) <sub>2</sub> CHMe <sub>2</sub>	Me	-CII2CII=CMe2	.CH2CH=CCl2	-CH2CH=CMe2	-(CH2)2CHMe2	Me	-CH2CH=CMe2	-CH2CH=CCl2	.CII,CH=CMe2	-(CH <sub>2</sub> ) <sub>2</sub> CHMe <sub>2</sub>	Me	-CH2CH=CMe2	.CH2CH=CCl2	-CH2CH=CMe2	-(CH <sub>2</sub> ) <sub>2</sub> CHMe <sub>2</sub>	Me	.CH2CH=CMe2
	0	0	NH	HN	NMe	0	0	NH	HN	NMe	0	0	Ŧ	HN	NMe	0	0	HN	HZ	NMe	
	Н	Н	OEt	OEt	OEt	OEt	OEt	OMe	OMe	OMe	ОМе	ОМе	П	Ŧ	Н	H	H	OEt	OEt	OEt	OEt
Ì	F	F	H	H	H	=	Ħ	H	H	H	Ħ	Ħ	F	F	F	F	ম	Н	Н	H	Н
	H	Н	Н	н.	Н	Н	H	н	Н	Н	Н	Н	Н	Н	Н	Н	н	н	Н	Н	H
	Н	Н	Н	Н	Н	11	Н	Н	Н	Н	Н	Н	H	Н	Н	Н	Н	H	H	Ξ	Ħ
	но	НО	НО	ОН	ЮН	011	ОН	ОН	ОН	ОН	ОН	ОН	Ю	НО	НО	HO	НО	НО	но	НО	НО
iù)	OMe	OMe	OMe	OMe	OMe	OMe	OMe	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me
	Me	Me	Me	Me	Me	Me	Me	H	Н	Н	Н	Ξ	=	H	H	H	H	Ħ	Ħ	н	Н
	H	=	=	Ξ	=	=	=	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me
		H	H	=	Ξ	=	=	≡	=	王	Ξ	Ξ	=	Ξ	Ξ	Ξ	H	Ξ	田	Ξ	田
	=	Ξ	Ξ	Ξ	=	=	Ξ	Ξ	Ξ	Н	H	Ξ	=	Ή	Ξ	Ξ	Ξ	Ξ	Ξ	田	H
	[-	. =	. [=	1	~	3	Œ	Ŀ	12.	Œ	G	[=	2	. 6	[±	GE.	<u>-</u>	G	Œ	Œ,	Œ
	E	=	Ξ :	E	Ξ	=	Ξ	Ξ	E	Ξ	Ξ	=	<u>↓</u> ≡	=	Ξ.	=	1=	Ξ	Ξ	Ξ	프
		717	- 12 · 12 · 12 · 12 · 12 · 12 · 12 · 12	÷ Z	-112.			112	il.	i	HN	i Z		FIN	HN	NIN.	AH.	, HN	HN.	î.Z.	.NH2
	2000.1	1.2.337	1.2330	0007-1	1000	1007-1	1 9303	0007.1	1 9.105	9066 1	1 997	1 9200	0007-1	1-2009	11001	1162-1	7107-1	1 0014	1 9316	0167.1	1.237

Table 319

			Т	1	Т	П	Т	$\neg$		$\neg$	Т	T	$\neg$	$\neg$	T	T		Т		Т	
5	-CH2CH=CCl2	CH2CH=CMe2	-(CH <sub>2</sub> ) <sub>2</sub> CHMe <sub>2</sub>	Me	.CH2CH=CMe2	-CH2CH=CCl2	CH2CH=CMe2	-(CH <sub>2</sub> ) <sub>2</sub> CHMe <sub>2</sub>	Me	-CH2CH=CMe2	CH2CH=CCl2	-CH2CH=CMe2	-(CH2)2CHMe2	Me	-CH2CH=CMe2	CH2CH=CCl2	.CH2CH=CMe2	·(CH <sub>2</sub> ) <sub>2</sub> CHMe <sub>2</sub>	Me	-CH2CH=CMe2	-CH2CH=CCl2
10	)		-	9	9	$\dashv$		_	9	-		_	-	0	$\dashv$	$\dashv$	$\dashv$		9	$\dashv$	
	0	HN	H	NMe	0	0	H	H	NMe		0	HN	H	NMe		9	HN	HN	NMe	0	0
15	OEt	OMe	ОМе	OMe	ОМе	ОМе	H	Ή	Ħ	E	H	OEt	OEt	OEt	OEt	OEt	OMe	OMe	OMe	ОМе	OMe
	Ξ	Ŧ	Ξ	H	H	H	Ŀ	Ŀ	[Z.	Œ,	Œ,	Ξ	Ξ	Ħ	Ξ	=	Η	H	Ξ	Ξ	Ħ
20	H	=	H	Ħ	Ξ	Ή	Ξ	H	Η	Ξ	Ħ	H	Ξ	Ξ	Ξ	Ξ	Ξ	Ħ	Ξ	Ξ	Η
	H	=	H	Ξ	=	Ξ	=	Ξ	Η	Ξ	н	Н	H	Ħ	Η	=	H	Н	H	Ξ	H
25	HO	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Ме	Me	ЮН	Н0	ОН	ОН	ЮН
	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Ме	OEt	OEt	) JEO	OEt	OEt
30	=	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	OMe	OMe	OMe	OMe	ОМе
	Me	=	11	Н	П	н	Н	11	Н	Н	Н	Ξ	Н	Н	Н	=	Н	H	Ξ	H	H
35	=	=	=	=	Ξ	=	Ξ	Ξ	H	Н	Н	Ξ	Н	H	Н	=	H	Ħ	=	=	H
	Ξ	=	Ξ	Ξ	H	Ξ	Ξ	H	Н	Н	Н	Ξ	Н	Н	Н	=	田	H	Ξ	≡	Ĥ
	5	- =	ત	=	13	Έ	۲.	٤.	Œ,	ţz.	[Z.,	£-,	[E,	阳	[E4	느	Œ,	[E.	Œ,	Œ	Œ
40	E	=	=	Ξ	=	=	Ξ	Ξ	Ξ	Ξ	Ξ	=	Ξ	王	Н	=	Ξ	三	=	Ξ	H
45	, IN.	i z	NII.	.NI.z	Z IZ	ZIZ.	, III.	NII.	-NH2	-NH2	·NH2	- FIZ.	-NH2	.NH2	·NH2	.IIV.	-NH2	-NH2	NII.	-NIL	.NH2
<b>50</b>	) 0.00	<u>c)</u> =	) (2.7 1.7 1.7 1.7 1.7 1.7 1.7 1.7 1.7 1.7 1	1-2391	9.60.	1.23.03	1.230	1.22.05	-236	1.2397	1.23.98	1.939	1.2330	1.2331	1.2332	) 2	2   2   3   4	1.23.35	3) 3	1.23.17	1.2338

Table 320

	2	Ξ	-	=	=	=	OMo	OE	HO	=	Ξ	Œ,	=	HN	-CH2CH=CMe2
1-23.33		= =	- =	= =	=	=	OMe	OE	HO	Ξ	H	-	Н	HN	·(CH <sub>2</sub> ) <sub>2</sub> CHMe <sub>2</sub>
1 9.141	- I.N.	=	. =	=	=	Ξ	OMe	OEt	НО	H	Н	FI	Н	NMe	Me
1.2342	ĨZ.	=	<u>:</u>	Ξ	=	=	OMe	OEt	OH	П	Н	F	Н	0	-CH2CH=CMe2
1.2343	21K.	Ξ	-	=	=	=	OMe	OEt	НО	11	Н	Ŀ	Н	0	.CH,CH=CCl2
1.2344	- IZ	=	٤.	=	=	=	OMe	OEt	011	П	-11	=	OEt	HN	-CH2CH=CMe2
1.2345	.HN.	Ξ	뚀	Н	H	H	ОМе	OEt	OH	H	H	н	OEt	HN	-(CH <sub>2</sub> ) <sub>2</sub> CHMe <sub>2</sub>
1.2346	ZIIN-	Ξ	Œ,	H	H	Н	OMe	OEt	ОН	Н	H	Н	OEt	NMe	Me
1.2347	"HN.	Ξ	Ŀ	Ξ	H	H	OMe	OEt	ОН	Н	Н	Н	OEt	0	-CH2CH=CMe2
1-2348	.NHz	Ξ	Ŀ	Ξ	Ξ	Н	OMe	OEt	но	Н	H	H	OEt	0	-CH2CH=CCl2
1-2349	.NHCH2CH=CMe2	Ξ	H	H	Ή	Me	Me	Me	Н	Н	H	Н	ОМе	HN	-CH2CH=CMe2
1-2350	-NHCH2CH=CMe2	=	Ξ	Ξ	Ξ	Me	Me	Me	H	Н	н	Н	ОМе	HN	·(CH <sub>2</sub> ) <sub>2</sub> CHMe <sub>2</sub>
1.2351	·NHCH2CH=CMe2	Ξ	Ξ	Ξ	H	Me	Me	Me	Н	Н	H	H	ОМе	NMe	Me
1.9352	.NHCH.	Ή	H	Ξ	H	Me	Me	Me	Н	Н	Н	Н	ОМе	0	.CH2CH=CMe2
1.2353	-NHCH <sub>2</sub>	H	田	Ξ	H	Me	Me	Me	Н	Н	Н	Н	OMe	0	.CH2CH=CCl2
1.2354	1	Н	王	Ή	H	Me	Me	Me	H	Н	Н	म	Н	HN	-CH2CH=CMe2
1.2355		H	H	Ξ	H	Me	Me	Me	Н	H	Н	댐	Н	H	-(CH2)2CHMe2
1.2356		H	王	H	H	Me	Me	Me	Н	Ξ	H	G.	Н	NMe	Me
1.2357		H	H	H	Н	Me	Me	Me	н	H	H	F	H	0	-CH2CH=CMe2
1.238	<b>!</b>	Н	Н	Н	Н	Me	Me	Me	Н	Ξ	표	Œ	H	0	.CH2CH=CCl2
1.2359	1	Н	Н	H	Ξ	Me	Me	Me	H	Ξ	H	Н	OEt	HN	-CH2CH=CMe2

Table 321

5	-(CH2)2CHMe2	Me	-CH2CH=CMe2	·CH2CH=CCl2	·CH2CH=CMe2	-(CHz)zCHMez	Me	.CH2CH=CMe2	.CH2CH=CCl2	·CH2CH=CMe2	-(CH2)2CHMe2	Ме	.CH2CH=CMe2	.CH2CH=CCl2	·CH2CH=CMe2	-(CH2)2CHMe2	Me	-CH2CH=CMe2	.CH2CH=CCl2	-CH2CH=CMe2	
	HN	NMe	0	0	HN	NH	NMe	0	0	HN	HN	NMe	0	0	HN	HN	NMe	0	0	NH	
15	OEt	OEt	OBt	OEt	OMe	ОМе	OMe	OMe	OMe	Н	H	Н	Н	Н	OEt	OEt	OEt	OEt	OEt	ОМе	
	H	Н	H	H	Н	Н	Н	н	н	দ্র	ᄄ	드	Ĺ,	Œ,	н	Ħ	H	H	H	Н	
20	Н	Н	Ħ	Н	Н	11	Н	Н	Н	н	Н	H	H	H	Н	H	H	H	H	Н	
	Н	Н	Ξ	Н	11	П	Н	Н	H	Н	Н	Η	Н	H	Н	н	Н	H	H	Н	Ī
25	Н	Н	11	Н	OII	OH	ЮН	ОН	ОН	ОН	ОН	ОН	ОН	НО	ОН	ОН	ОН	ЮН	НО	но	
	Me	Me	Me	Me	OMe	ОМе	OMe	ОМе	ОМе	OMe	OMe	OMe	OMe	OMe	OMe	ОМе	OMe	OMe	OMe	Me	
30	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Н	
	Me	Me	Me	Me	Н	11	H	Н	Η	Н	H	Н	Н	Н	Н	Н	Н	Н	Н	Me	
35	=	Ξ	H	Н	П	=	H	Н	=	Н	Н	Н	Н	Н	H	H	Н	Н	Н	Н	Γ
	Ξ	Ξ	Н	Н	Н	н	H	Н	==	H	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	
	Ξ	=	Ξ	H	=	=	=	王	Ξ	Ξ	H	Ή	Н	н	Н	Н	Н	Н	Н	Н	
40	Ξ	Ξ	Ξ	=	Ξ	=	Ξ	Ξ	Ξ	Ξ	프	Ξ	Ξ	Н	Н	H	H	Н	Н	H	L
45	-NHCH2CH=CMe3	.NIICII,CII=CMe2	.NIICII2CII=CMe2	.NHCH2CH=CMe2	-NHCH2CH=CMe2	.NIICII2CII=CMez	.NHCH2CH=CMe2	-NHCH2CH=CMe2	.NHCH2CH=CMe2	.NHCH2CH=CMe2	.NHCH2CH=CMe2	.NHCH2CH=CMe2	.NIICHZCII=CMez	.NHCH2CH=CMe2							
	1 -	r	1					1 -				1			1			1			1

1-2366 1-2367

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I-2369 1-2370 1.2372 I-2373 I.2374 1.2375 1.2376 I-2377 1.2378

1-2371

.NHCH2CH=CMe2 | H | H | H | Me

I-2380 I.2379

Table 322

																				_
Me	-CH2CH=CMe2	-CH2CH=CCl2	.CH2CH=CMe2	-(CH2)2CHMe2	Me	.CII2CH=CMe2	.CH2CH=CCl2	.CH2CH=CMe2	·(CH <sub>2</sub> ) <sub>2</sub> CHMe <sub>2</sub>	Me	.CH2CH=CMe2	.CH2CH=CCl2	.CH2CH=CMe2	-(CH <sub>2</sub> ) <sub>2</sub> CHMe <sub>2</sub>	Me	.CH2CH=CMe2	.CH2CH=CCl2	.CH2CH=CMe2	-(CH2)2CHMe2	Ме
NMe	0	0	HN	HN	NMe	0	0	HN	HN	NMe	0	0	NH	HN	NMe	0	0	NH	NH	NMe
OMe	ОМе	ОМе	H	H	Н	=	H	OEt	OEt	OEt	OEt	OEt	OMe	OMe	ОМе	ОМе	OMe	H	=	Н
H	11	H	F	Ŀ	F	-	Œ,	Н	H	H	Н	Н	Н	Н	Ή	H	Н	Ŀ	Ŀ	Ŀ
H	11	Н	Ξ	Ξ	Ξ	Ξ	H	н	Ħ	H	Н	Н	Н	н	н	H	Н	Н	Н	Н
=	Н	11	==	H	Ξ	Ξ	Н	H	Н	Н	Н	Н	Н	Н	Н	H	Н	Н	H	Н
HO	IIO	OH	IIO	HO	011	OII	ЮН	ОН	ОН	ОН	ОН	ОН	Me	Me	Me	Me	Me	Me	Me	Me
Me	₩	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Ме	Me	Me	Me	Me	Me
=	=	П	П	П	11	П	Н	Н	Н	H	Н	Н	Me	Me	Me	Me	Me	Me	Me	Me
Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Мe	Me	Me	Н	Н	Н	Н	Н	Н	Н	H
=	=	=	11	Н	=	==	Н	H	H	Н	H	Ξ	Н	Н	Н	Н	Н	H	Н	H
=	=	Ξ	н	Н	11	=	Н	Н	Н	Н	H	H	Н	Н	Н	Н	Н	Н	H	Н
=	=	=	Ξ	Ξ	Ξ	=	Н	H	Н	H	H	=	Н	Н	Н	Н	Н	Н	Н	H
Ξ	=	=	Ξ	Ξ	=	Ξ	H	Ξ	H	Ξ	Ξ	=	Ξ	H	Ξ	H	Ξ	Ξ	Ξ	Ξ
.NHCH-CH=CMe2	)-11:31:N	NICH.		-NIICH*C	<u> </u>	-NIICH2CII=CMe2	.NIICH2CH=CMe2		L	.NHCH2CH=CMe2	i	-NIICIE	NHCH2CH=CMe2	.NHCH2CH=CMe2	-NHCH2CH=CMe2	NHCH	-NHCH2	-NHCH2	NICH	.NHCH2
1.9381	1.2:182	1.2383	1.2384	1.2385	1.236	1.2387	1.2388	1.2389	1.2390	1.2391	1.2392	1.2393	1.2394	1.2395	1.2396	1.2397	1-2398	1.2399	1.2400	1.2401

-CH2CH=CMe2

Me

HN NMe 0

OEt OEt OEt

프 H

H Ξ

ОН ОН HO

I-2419

I.2420 1.2421

H

OEt OEt

OMe OMe

H

H H

Ħ ı

H H

Η H

.NHCH2CH=CMe2 .NHCH2CH=CMe2

Table 323

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NICCITCITCITECTMC2   11   11   11   11   11   11   11		<del></del>	<del></del> -		<del></del> -	<del></del>	<del></del>	<del></del>	—т	<del></del>	<del></del>		r			—т		<del></del>		<del>-</del> T	
		.CH2CH=CMe2	·CH2CH=CCl2	-CH2CH=CMe2	-(CH <sub>2</sub> ) <sub>2</sub> CHMe <sub>2</sub>	Me	.CH2CH=CMe2	-CH2CH=CCl2	-CH2CH=CMe2	-(CH2)2CHMe2	Me	-CH2CH=CMe2	.CH2CH=CCl2	.CH2CH=CMe2	-(CH <sub>2</sub> ) <sub>2</sub> CHMe <sub>2</sub>	Me	.CH2CH=CMe2	.CH2CH=CCl2	-CH2CH=CMe2	-(CH <sub>2</sub> ) <sub>2</sub> CHMe <sub>2</sub>	
		0	0	HN	HN	NMe	0	0	HN	HN	NMe	0	0	HN	NH	NMe	0	0	HN	HN	
		H	=	OEt	OBt	OEt	OEt	OEt	OMe	OMe	OMe	OMe	OMe	H	Н	Н	H	н	OEt	OEt	
		Œ	균	H	=	H	Ξ	Ξ	Ξ	H	Ħ	H	Ξ	Œ	Œ,	Ŀ	F	<u>[2.</u>	H	H	•
		H	Ξ	Н	H	н	н	H	H	Н	Н	Н	Н	H	Н	H	Н	H	H	H	•
	-	Ξ	=	Н	=	Н	=	Ħ	H	Н	н	Н	H	Н	Н	Н	Н	H	H	H	
		Me	Me	Me	Me	Me	Me	Me	OH	ОН	ЮН	ОН	НО	ОН	ОН	ОН	ОН	ЮН	ЮН	ЮН	
		Me	Me	Me	Μe	Me	Me	Me	i					OEt		L		. 1		OEt	
		Me	Me	Me	Me	Me	Me	Me	ОМе	ОМе	ОМе	OMe	ОМе	ОМе	ОМе	OMe	OMe	OMe	OMe	ОМе	
		Ξ	Ξ	Ξ	Ξ	Ξ	=	=	11	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	н	
		=	=	=	=	Ξ	=	Ξ	=	H	H	Н	H	Н	Н	Н	H	Ħ	H	$\vdash$	
		Ξ		-		Ξ	=	1		-	-				-	-		H		_	
		$\vdash$		-	_	-	-	1				<u> </u>			_			-	$\vdash$		
NIICHZCII=CMC2		=	=	=	=	=	=	E	Ξ	Ξ	H	H	H	H	H	H	Ξ	H	H	H	
		-NHCH2CH=CMe2	NIICH2CH=CMe2	NIICH2CH=CMe2	NHCH2CH=CMe2	.NIICH,CH=CMe2	NHCH2CH=CMe2	NHCH2CH=CMe2	NHCH2CH=CMe2	NHCH2CH=CMe2	.NHCH2CH=CMe2	.NHCH2CH=CMe2	-NHCH2CH=CMe2	.NHCHzCH=CMe2	.NHCH2CH=CMe2	.NHCH2CH=CMe2	.NIICH2CH=CMe2	.NHCH2CH=CMe2	.NHCH2CH=CMe2	.NHCH2CH=CMe2	

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1.2403

1.2404

1.2405 1-2406 1.2408 1.2409 I-2410 1.2411

1-2407

1-2412 1.2413 1-2414 1.2415 1.2416 1.2417 1.2418

Table 324

	1	3	OMe	OEt	HO	Ξ	H	=	OEt	0	.CH2CH=CCl2
= =	_l _	= Š	Me	Me	=	=	=	: =	UMe	Ę	-CII2CII=CMe2
┼		₹ 3	Me	Me	н	王	Ξ	H	OMe	H	-(CH <sub>2</sub> ) <sub>2</sub> CHMe <sub>2</sub>
н		Me	Me	Me	н	H	Ξ	H	OMe	NMe	Me
нн		Me	Me	Me	Н	=	Ξ	三	OMe	0	.CH2CH=CMe2
11 11 11		S B	Me	Me	==	=	=	=	OMe	0	.CII,CH=CCI2
H		Me	Me	Me	Н	H	Ξ	ſĿ,	H	Ħ	.CH2CH=CMe2
н		Me	Me	Me	Н	Ξ	H	E	H	HZ	-(CH2)2CHMe2
н		Me	Me	Me	H	H	H	Œ	H	NMe	Me
н	-	Me	Me	Me	Н	Н	Н	Ŀ	H	0	-CH2CH=CMe2
ннн	├	Me	Me	ЭМ	H	н	H	ĵĿ,	H	0	-CH2CH=CCl2
Ξ	-	Me	Me	Me	H	н	H	н	OEt	Ħ	-CH2CH=CMe2
	├	Me	Me	Me	Н	H	Н	H	OEt	HN	·(CH2)2CHMe2
ннн	_	Æ	Me	Me	H	Н	Н	H	OEt	NMe	Me
ннн	<del></del>	₩	Me	Me	Н	Н	Н	H	OEt	0	.CH2CH=CMe2
н н н		Me	Me	Me	Н	Н	H	H	OEt	0	.CH2CH=CCl2
ннн		H	Me	ОМе	НО	Н	Н	H	OMe	NH	.CH2CH=CMe2
田	<del>                                     </del>	H	Me	OMe	НО	Н	Н	Н	OMe	HN	·(CH <sub>2</sub> ) <sub>2</sub> CHMe <sub>2</sub>
ннн		Ħ	₩	ОМе	ОН	Н	Н	Н	OMe	NMe	Me
╁		Н	Me	OMe	НО	Н	H	Н	OMe	0	.CH2CH=CMe2
ннн		7	Me	OMe	НО	H	H	H	OMe	0	-CH2CH=CCl2

Table 325

						_															
,	.CH2CH=CMe2	-(CH <sub>2</sub> ) <sub>2</sub> CHMe <sub>2</sub>	Me	-CH2CH=CMe2	.CH2CH=CCl2	-CH2CH=CMe2	-(CH2)2CHMe2	Me	-CH2CH=CMe2	-CH2CH=CCl2	-CH2CH=CMe2	-(CH2)2CHMe2	Me	-CH2CH=CMe2	.CH2CH=CCl2	-CH2CH=CMe2	·(CH2)2CHMe2	Me	.CH2CH=CMe2	.CH2CH=CCl2	-CH2CH=CMe2
	NH	HN	NMe	0	0	H	HN	NMe	0	0	H	H	NMe	0	0	HN	HN	NMe	0	0	HN
;	Н	Н	Н	Н	Н	OEt	OEt	OEt	OEt	OEt	ОМе	ОМе	ОМе	ОМе	OMe	Н	H	Н	Н	H	OEt
	Ľ.	ĽĿ,	Ľ.	드	Œ	Ξ	H	H	Н	H	H	H	H	H	H	Œ,	ĵĿ,	Ŀ	단	ſ£,	н
)	Н	H	Ξ	Ή	Ξ	Ξ	H	H	н	H	H	H	H	H	甲	H	Н	H	H	田	H
	Н	Н	Ξ	Н	Ξ	=	Н	Н	Н	Н	H	H	H	H	H	Н	Н	H	Н	н	Н
;	ЮН	НО	OH	ОН	ОН	011	ОН	НО	ЮН	НО	OH	ЮН	ЮН	ОН	ЮН	НО	НО	ОН	ОН	НО	НО
	ОМе	OMe	OMe	OMe	OMe	OMe	ОМе	OMe	OMe	OMe	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me
,	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Ξ	н	н	H	Ħ	H	н	H	H	Ξ	Н
	Н	Н	=	н	11	=	Н	Н	Н	н	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me
;	Н	Н	Н	Н	Н	=	Н	Н	Н	Н	Η	н	H	H	Ξ	H	Н	H	Н	H	H
	Ξ	Н	н	Н	Н	11	Н	Н	Н	Н	Н	H	H	Ξ	H	Н	Н	Н	Н	Ξ	Ή
	Н	Н	Н	Н	Н	=	Н	Н	Н	Н	Н	Н	Н	Н	H	Н	Н	Н	Н	H	Н
)	Ξ	Н	Ξ	H	H	11	H	Н	Н	Н	П	Н	Н	Н	Ξ	Н	Н	Н	Н	Ħ	Н
5	.OMe	.OMe	-OMe	.OMe	OMe.	.OMe	.OMe	.OMe	.OMe	.OMe	.OMe	-OMe	-OMe	-OMe	-OMe	-OMe	-OMe	-OMe	-OMe	.OMe	.OMe
											_						-				—

I-2458 I-2459

1.2457

' Table 326

Table 327

10	Me	-CH2CH=CMe2	.CH2CH=CCl2	-CH2CH=CMe2	·(CH2)2CHMe2	Ме	.CH2CH=CMe2	-CH2CH=CCl2	-CH2CH=CMe2	-(CH2)2CHMe2	Me	-CH2CH=CMe2	.CH2CH=CCl2
	NMe	0	0	HN	HZ	NMe	0	0	HN	HN	NMe	0	0
15	OMe	OMe	OMe	Н	Н	Н	Н	Н	OEt	OEt	OEt	OEt	OEt
	H	Н	Н	Ŀ	Œ,	Ŀ	Œ,	Ĩ£,	н	Н	H	H	Н
20	H	H	Н	н	Н	Н	Н	H	Н	Н	Н	н	Н
	Ξ	П	Н	Н	Н	Н	H	Н	Н	Н	Н	H	Н
25	НО	011	0Н	ОН	ЮН	ОН	OH	ОН	ОН	НО	ОН	ОН	ОН
	OE	OEt	OEt	OEt	OEt	OEt	OEt	OEt	OEt	OEt	OEt	OEt	OEt
30	OMe	OMe	OMe	OMe	OMe	OMe	ОМе	ОМе	ОМе	ОМе	OMe	ОМе	OMe
	H	Ξ	Н	Н	Н	11	Н	Н	Н	Н	Н	Н	Н
35	=	=	Н	H	Н	П	Н	H	Н	Н	Н	Н	Н
		=	Ξ	Ξ	H	=	H	H	H	H	Н	н	H
	=	=	Ξ	Ξ	Ξ	Ξ	Н	Н	Ή	H	Н	Н	Н
40	Ξ	=	Ξ	=	H	Ξ	Ξ	H	Ξ	Н	H	Н	H
45	OMo.	.OMe	-OMe	-OMe	.OMe	-OMe	.OMe	-OMe	-OMe	.OMe	.OMe	-OMe	.OMe
50	1.2486	1.2.187	1.2488	1.2.189	1-2490	1.2491	1.2492	I-2493	1.2494	1.2495	1.2496	1.2497	1-2498

55 [0167] In the above tables, "-OCH<sub>2</sub>O-\*" and "\*" mean that they taken together form a ring.

### Experiment 1 Suppressive effect on a mitogenic activity of mouse splenocytes in vitro

[0168] In 96-well microtiter plate 5 x  $10^5$  C3H/HeN mouse splenocytes suspended in 0.1 ml of 10 % fetal bovine serum-fortified RPMI 1640 medium containing 2 mM of sodium bicarbonate, 50 units/ml of penicillin, 50  $\mu$ g/ml of streptomycin and 5 x  $10^{-5}$  M of 2-mercaptoethanol were added. Then, 5  $\mu$ g/ml of Concanavalin A (Con A) or 10  $\mu$ g/ml of lipopolysaccharide (LPS) as a mitogen and the compound of a pre-determined concentration of the present invention were added to each well so that a final volume of each well reached 0.2 ml. Each compound of the present invention was dissolved in dimethylsulfoxide (DMSO) and diluted with the above RPMI 1640 medium to adjust the final concentration of 100 ng/ml or less. The splenocytes in the 96-well microtiter plate were cultivated at 37 °C for 3 days in an incubator keeping the humidity 100 %, carbon dioxide 5 % and air 95 %. Then, 25  $\mu$ l of 6 mg/ml MTT [3-(4,5-dimethylthiazol2-yl)-2,5-diphenyltetrazolium bromide] (Sigma) was added to the each well and cultivated at 37 °C for 4 hours under the same conditions. After the cultivation, 50  $\mu$ l of 0.02 N hydrochloric acid in 20 % sodium dodecyl sulfate (SDS) was added to formazan generated and left at 37 °C for 24 hours for dissolving formazan. An absorption intensity (OD) of formazan generated in proportion to the number of living cells was measured with an immunoreader (InterMed) equipped with a 570 nm filter (The Journal of Immunological Method, 65, 55-63, 1983). The 50 % inhibitory concentration of a cell proliferation (IC 50) was calculated from a correlation between the concentration of the compound of the present invention and the absorption intensity.

### Experiment 2 Anti-proliferative activity on EL4 cells

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[0169] In 96-well microtiter plate  $4 \times 10^4/0.1$  ml of mouse thymoma strain EL4 cells were added and 0.1 ml of the compound of the present invention was added to the mixture so that the concentration was in the range of 0-5,000 ng/ml. After the cultivation for 3 days, the IC<sub>50</sub> was calculated by the MTT method as described in Experiment 1. [0170] The results are shown in Tables 328-329.

Table 328

Compound	ConA IC <sub>50</sub> (ng/ml)	LPS ICso (ng/ml)	EL-4 IC <sub>50</sub> (ng/ml)
I-1	0.86	1.92	8.56
I-9	<20	<20	<20
I-12	1.3	2.8	46.2
I-22	5.62	4.26	6.2
I-35	19.5	39.4	140
I-40	6.1	16.5	37.4
I-41	0.73	1.74	4.89
I-46	10.6	23.9	67.5
I-49	8.89	16.2	31.7
I-50	3.83	9.2	11.9
I-51	6.6	14.7	70.0
I-59	8.5	22.4	140
I-62	29.2	25	23.4
I-63	13	27	16
I-66	0.22	0.35	0.48
I-71	4.56	14.2	31.2
I-101	0.8	0.5	1.8
I-103	3.4	3.7	4.6
I-104	3.0	3.1	4.8
I-106	0.6	0.4	2.7
I-107	0.6	0.7	12
I-121	0.8	1.2	0.8
I-163	<20	<20	<20
I-173	<20	<20	< <b>2</b> 0
I-175	<20	29.4	<20
I-187	12.0	25.1	36.2
I-211	<20	<20	<20
I-248	<10	<10	312
I-250	<10	<10	88.3
I-251	<10	<10	97.4

I-255	<20	<20	<20
I-256	<20	28.7	310
I-275	6.34	13.5	100
I-276	1.8	3.1	200
I-299	5.53	7.85	13.6
I-301	7.06	11.0	15.8
I-360	<20	<20	99.8
I-361	<20	<20	124
I-418	255	497	>10000
I-427	255	497	>10000
· I-457	<20	<20	205
I-466	<20	<20	46
I-484	14.7	32.2	91.4
I-513	6.89	11.1	61.8
I-525	0.76	1.11	5.0
I-639	4.59	6.25	50
I-661	0.67	1.28	50
I-739	18.8	20.7	430
I-742	10	20	45.2
I-758	6.78	9.63	55.1
I-773	8.45	12.6	92.9
I-797	1.75	3.71	26.5
I-834	36	46	226
I-839	1.48	1.87	20.7
I-840	5.31	6.94	31.9
I-878	14.1	27.4	194
1-880	23.0	41.1	105
I-892	<0.2	<0.2	1.41
I-893	0.49	1.05	7.06

Table 329

Compo	ConA	LPS	EL-4
und	IC <sub>50</sub>	IC <sub>50</sub>	IC <sub>50</sub>
7.005	(ng/ml)	(ng/ml)	(ng/ml)
I-907	23.4	44.5	82.7
I-908	0.45	0.86	3.50
1-909	<20	<20	20
I-931	2.93	5.76	4.37
I-934	16.1	22.2	52.7
I-943	2.97	4.89	46.8
I-962	12.1	16.3	20.4
I-970	<20	<20	50.3
I-976	17.7	34.2	330
I-981	14.9	27.1	>100
I-982	2.0	3.75	55.3
I-988	0.2	0.31	1.23
I-993	5.10	7.54	13.8
I-995	20.9	25.2	49.2
I-1006	8.66	12.3	33.0
I-1007	8.05	10.4	13.1
I-1017	9.74	16.7	72.9
I-1031	<20	21.2	41.7
I-1040	1.80	5.31	1.85
I-1043	2.19	3.27	9.70
I-1058	21.2	30.2	48.8
I-1066	3.91	4.87	20.6
I-1095	6.90	9.57	34.2
I-1103	4.7	6.9	31.4
I-1107	5.8	9.1	34.1
I-1115	<20	<20	<20
I-1121	3.12	9.0	18.6
I-1123	0.80	2.00	3.9
I-1124	94	272	>10000
I-1126	79	234	>10000
I-1127	44	111	412
I-1128	5.00	11.4	26.0
I-1135	1.00	2.70	11.7

I-1160	10.6	14.1	97.4
I-1161	2.4	4.2	33.2
I-1162	0.65	1.95	30.9
I-1167	0.08	0.23	8.1
I-1168	0.26	0.54	12.5
I-1171	0.63	0.64	27.5
I-1172	13.1	19.4	>100
I-1173	16.4	31.1	>100
I-1177	12.2	20.8	47.2
I-1191	0.16	0.66	22.8
I-1193	1.46	5.3	50
I-1203	14.1	>100	43.5
I-1212	12.87	24.2	85.0
I-1217	<20	<20	<20
I-1227	197	423	>10000
I-1229	5.95	8.05	20.4
I-1230	12.0	15.3	5.22
I-1232	3.77	4.93	15.1
I-1240	2.50	3.34	11.8
I-1248	25.9	36.8	118
I-1250	0.68	1.35	2.90
I-1251	6.30	10.7	27.8
I-1263	<20	<20	29.8
I-1271	0.10	0.32	1.66
I-1274	0.33	1.38	1.44
I-1276	<20	31.3	105
I-1277	<20	<20	<20
I-1278	<20	<20	41.7
I-1284	<20	<20	<20
I-1286	<20	<20	<20
I-1289	<20	<20	<20
I-1290	<20	<20	27.3
I-1295	<20	<20	<20
I-1296	<20	<20	39.7

[0171] As shown in the above, the compound of the present invention has immunosuppressive and anti-allergic states of effects.

### Experiment 3 Suppressive effect on the antibody production against bovine y globulin (BGG)

[0172] On an immunizing day and 7 days after, 50 µg of BGG was subcutaneously inoculated to backs of BALB/c mice (male, 6-8 weeks old) for inducing an immune reaction. After the compound of the present invention was dissolved or suspended in N, N-dimethylacetoamide, the mixture was diluted with miglyol 812 neutral oil. A proper volume of the compound was orally administered (p.o.) to mice every day from the next day of the immunizing. A two hundredth weight to body weight of miglyol was administered to mice in a control group. After 21 days, blood was drawn from each mouse and a serum was separated. BGG-specific IgE in a serum was measured by the sandwich ELISA method using a BGG-coating plate. The suppressive rate of IgE production was calculated from the dilution rate of the serum which has the same absorption intensity as that of the control group for judging the effect of the compound of the present invention. The results are shown in Table 330.

Table 330

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Compound	Dose (mg/kg)	Suppressive rate of anti- gen-specific lgE (%)
I-525	100	. >95
I-915	100	>99
I-892	5	>99
1-963	50	>99
I-1031	100	>99
l-1093	100	>99

## Experiment 4 Suppressive effect on the IgE production against ovalbumin (OVA)

### o 1) Animals

[0173] BALB/c mice (female, 8-10 weeks old) and Wistar rats (female, 8-10 weeks old) which were bought from Japan SLC, Inc. (Shizuoka) were used.

#### Immunizing method

[0174] BALB/c mice were immunized by an intraperitoneal administration of 0.2 ml suspension of 2 µg of ovalbumin (OVA) and 2 mg of aluminium hydroxide gel in physiological saline. After 10 days, blood was drawn from hearts, sera were separated and stocked at -40 °C till the measurement of an IgE antibody titer.

### 3) Compounds

[0175] After the compound of the present invention was dissolved or suspended in N, N-dimethylacetoamide, the mixture was diluted 20 times with miglyol 812 neutral oil. The obtained solution was orally administered to mice at 0.1 ml per mouse. The administration was continued for 10 days from the immunizing day to the day before drawing blood. IPD-1151-T (a compound described in Jpn. Pharmacol. (1993) 61, 31-39) and a compound No. 36 (a compound 36 described in J. Med. Chem. (1997) 40: 395-407) were examined as controls by the same method.

### 4) Measurement of anti-OVA IgE antibody titer (PCA titer)

[0176] The samples 2-fold diluted with physiological saline were prepared from the obtained mouse serum and each  $50~\mu l$  of the solution was intradermally injected to backs of Wistar rats which previously hair cut. After 24 hours, a passive cutaneous anaphylaxis reaction (PCA) was induced by an intravenous injection of 0.5 ml of physiological saline containing 1 mg of OVA and 5 mg of Evans' blue dye. After 30 minutes, the rats were sacrificed and the highest dilution rate of the serum giving bluing with a diameter of more than 5 mm was recorded as the PCA titer. For example, when a serum is positive for the PCA reaction till  $2^7$  times dilution, the anti-OVA lgE antibody titer of the mouse is defined as 7. The results are shown in Table 331.

Table 331

Compound	Dose (mg/kg)	PCA Titer
I-484	40	<0
1-839	40	2.4**
1-851	40	1.8**
I-892	40	<0
1-893	40	2.5**
1-908	40	3.4**
I-915	40	<0
1-925	40	1**
1-928	40	<0
I-948	40	2.6**
1-957	40	4.5**
1-962	40	<0
I-963	40	3.6**
1-988	40	0.8**
I-1031	40	4.4**
I-1043	· 40	4.8**
I-1066	40	<0
I-1072	40	0.8**
I-1095	40	<0
l-1123	40	2.4**
I-1135	40	4.8**
I-1167	40	4.4**
I-1171	40	<0
I-1177	40	3.6**
I-1229	40	<0
I-1232	40	1.8**
I-1242	40	2.8**
I-1258	40	1.2**
I-1271	40	<0
IPD-1151-T	50	9.8
No.36	10	10.4

\*\* • • • P<0.01 vs vehicle

[0177] The PCA ticers of mice in a group to which any compound was not administered were 9-12.

IPD-1151-T · · ·

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No. 36 · · ·

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[0179] As shown in the above, the compound of the present invention has a suppressive effect on the antibody production.

Experiment 5 Suppressive effect on the antibody production of human lymphocytes

- 1. Experimental method
- 1) Human peripheral blood

[0180] Human peripheral blood was drawn from healthy male adults by plastic syringes filled with heparin (final concentration 1.5%). Lymphocytes were collected immediately after blood was drawn.

- 2) Medium
- §55 [0181] RPMI medium (Nissui Pharmaceutical Co., Ltd.) containing 10% fetal bovine serum (HyClone Lab.) inactivated at 56 °C for 30 minutes, penicillin (100 units/ml) and streptomycin (100 μg/ml) (GIBCO) was used.
  - 3) Compounds

[0182] After the compound (I-839) of the present invention was dissolved in dimethylsulfoxide (Nakaraitesk) at 2 μg/ml, the solution was diluted with the medium to adjust a final concentration to be 0.01 pg/ml - 10 μg/ml. The compound No. 36 was examined as a control by the same method.

4) Human lymphocytes

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[0183] Human peripheral blood was stratified in a tube filled with Ficoll-Hypaque mixture solution (Dainippon Pharmaceutical Co., Ltd. (Osaka), Mono-poly resolving medium) at the same volume and centrifuged at 300 x g at 15 °C for 30 minutes to obtain a lymphocytes layer. After the collected cell suspension was washed with sterile Hanks' solution (Nissui Pharmaceutical Co., Ltd.) by centrifugation, sterile distilled water was added to the suspension. After 30 seconds, twice-concentrated Hanks' solution of which amount is equal to the water was added for removal of contaminating erythrocytes. Lymphocytes which were filtered by a nylon mesh and washed by centrifugation were used for experiments as human lymphocytes.

5) Induction of the IgE antibody production by stimulation of B cells

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[0184] In 96-well cultivating plate (Sumitomo bakelite) the lymphocytes were inoculated 2 x  $10^5$  cells per well, and the compound, anti-human CD 40 antigen (Pharmingen, 2  $\mu$ g/ml), human recombinant interleukin-4 (IL-4) (Genzyme, 0.1  $\mu$ g/ml) and human recombinant interleukin-10 (IL-10) (Genzyme, 0.2  $\mu$ g/ml) were added and cultivated at 37 °C under

5% of CO<sub>2</sub> (0.2 ml/well). After the cultivation for 10 days, the amount of antibody in a supernatant was quantified by ELISA method.

Quantification of the IgE antibody

[0185] A commercial kit MESACUP IgE test (Medical & Biological Laboratories Co., Ltd.) was used for the quantification of the IgE. The experiment followed an instruction manual and was carried out in triplicate to calculate the average.

7) Quantification of the IgG and IgM antibodies

[0186] ELISA method was used for the quantification. In 96-well plate (Nunc) 50  $\mu$ l of 1  $\mu$ g/ml F(ab')<sub>2</sub> Goat Anti-human lgG + A + M (H+L) (ZYMED Laboratories) was added and the plate was coated at 4 °C overnight. The plate was washed twice with 0.05 % Tween/PBS (PBST) solution and 100  $\mu$ l of 0.5% gelatin/PBST was added for blocking at room temperature for 2 hours. After washing three times with PBST, 100  $\mu$ l of a sample diluted with PBS or 100  $\mu$ l of human Plasma lgG standard solution or lgM standard solution (BioPur AG, Switzerland) of a pre-determined concentration was added and incubated at room temperature for 1 hour. After washing three times with PBST, 100  $\mu$ l of a peroxydase-labeled anti-human lgG antibody or anti-human lgM antibody (Southern Biotechnology, Birmingham) which was diluted two thousandth with PBS was added and incubated at room temperature for 1 hour. After washing four times with PBST, 100  $\mu$ l of a substrate, o-phenylenediamine dihydrochloride, was added for color development. After 30 minutes, the reaction was terminated by addition of 50  $\mu$ l of 2 N HCl, and the absorption at 492 nm was measured with a microplate reader and the amount of the lgG and lgM was calculated from a standard curve of a standard solution.

#### 2. Results

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[0187] The results are shown in Figures 1 and 2. The compound (I-839) of the present invention has a selective suppressive effect on the IgE antibody production and the intensity was 2,000 times or more of that of the IgG production and 30,000 times or more of that of the IgM. The suppressive effects of the typical compounds on the antibody production are shown in Table 332.

Table 332

Compound	10	C <sub>50</sub> (ng/ml)	
	lgE	IgG	lgM.
I-839	<0.00001	0.027	0.37
I-892	<0.00001	<0.00001	>1
I-121	<0.0001	<0.0001	>1
1-988	<0.00001	<0.00001	>1
1-893	<0.00001	<0.0001	>1

Experiment 6 Suppressive effect on antibody production of mouse spleen lymphocytes

- 1. Experimental method
- 1) Animals
- [0188] BALB/c (nu/nu) mice were bought from Japan SLC, Inc. (Shizuoka) and 7 weeks old-male mice here used.
  - 2) Medium
  - [0189] RPMI medium (Nissui Pharmaceutical Co., Ltd.) containing 10 % fetal bovine serum (HyClone Lab.) inactivated at 56 °C for 30 minutes, penicillin (100 units/ml) and streptomycin (100 µg/ml) (GIBCO) was used for experiments.

#### 3) Compounds

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[0190] Each of the compounds was dissolved in dimethylsulfoxide (Nakaraitesk) at 2 µg/ml and diluted with the medium to adjust a final concentration to 0.1 pg/ml - 10 µg/ml.

#### 4) Mouse spleen lymphocytes

[0191] A spleen of mouse was taken out and put in a cultivating schale which was filled with Hanks' solution. The spleen was crushed and the cells were pushed out from the organ and filtered through a metal mesh (200 mesh). After the collected cell suspension was washed by centrifugation with sterile Hanks' solution (Nissui Pharmaceutical Co., Ltd.), sterile distilled water was added. After 30 seconds, an equal amount of twice-concentrated Hanks' solution was added for removal of contaminating erythrocytes. The cell suspension, filtered by a nylon mesh and washed by centrifugation, were used as mouse spleen lymphocytes for experiments.

5 5) Induction of the IgE antibody production by the B cell stimulation

[0192] In 96-well cultivating plate (Sumitomo Bakelite Company Limited) mouse spleen lymphocytes were inoculated  $2 \times 10^5$  cells per well. The compound of the present invention, lipopolysaccharide (DIFCO Lab., 2  $\mu$ g/ml) and mouse recombinant interleukin-4 (IL-4) (Genzyme, 50 ng/ml) were added to the well and cultivated at 37 °C under 5 % CO<sub>2</sub> (0.2 ml/well). After the cultivation for 10 days, the amount of the antibody in a supernatant was quantified by ELISA method.

- 6) Quantification of the IgE antibody
- 25 [0193] A commercial mouse IgE EIA kit (Yamasa Shoyu Co., Ltd.) was used for the quantification of the IgE. The experiment followed an instruction manual and was carried out in triplicate to calculate the average.
  - 7) Quantification of the IgG1, IgG2a and IgM antibodies
- [0194] In 96-well plate 50 μl of 10 μg/ml Goat Anti-Mouse Ig (IgM+G+A, H+L) (Southern Biotechnology, Birmingham) was added and the plate was coated at 4 °C overnight. After the plate was washed twice with a PBST solution, 100 μl of 0.5 % gelatin/PBST was added and the plate was blocked at room temperature for 2 hours. After washing three times with PBST, 100 μl of culture supernatant which was diluted with PBS or 100 μl of an antibody standard solution (Mouse IgG1 standard, Mouse IgG2a standard, Mouse IgM standard, BETHYL Laboratories) of a pre-determined concentration was added and incubated for 1 hour. After washing three times with PBST, 100 μl of diluted solution of alkalinephosphatase-labeled anti-mouse IgG1, IgG2a or IgM antibody (Southern Biotechnology, Birmingham) was added and incubated at room temperature for 1 hour. After washing four times with PBST, a substrate, p-nitrophenyl phosphate disodium, was added, and after 30 minutes-incubation period, after 5 N-NaOH was added to stop the reaction. The absorption at 405 nm was measured with a microplate reader, and the amount of the antibody was calculated from the standard curve. For the dilution of the mouse sample and the standard solution was used 10 % FCS/PBS.

### 2. Results

[0195] The results are shown in Figure 3. The figure shows that the compound (I-967) has a suppressive effect on the IgG1, IgG2a and IgM antibodies production only at 1000 ng/ml or more but has a dose-dependent suppressive effect on the IgE production at 0.01 ng/ml or more. In Table 333 the suppressive effects of the representative compounds on the IgE, IgM, IgG1 and IgG2a production are shown.

Table 333

Compound	IC <sub>50</sub> (ng/ml)			
	IgE	lgG1	lgG2a	lgM
I-73	0.044	2600	4900	4200
I-963	0.00026	510	3600	3500
I-967	0.1	3500	3600	>10000

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Experiment 7 Suppressive effect on bronchial inflammatory cell infiltration by inhalation of antigen.

- 1. Experimental method
- 1) Animals

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- [0196] BALB/c mice bought from Japan SLC, Inc. (Shizuoka) (female, 8-11 weeks old) were used for experiments.
- 2) Sensitizing and challenge of antigen

[0197] For immunizing, 0.2 ml of a suspension of 2  $\mu g$  of ovalbumin (OVA; Grade V, SIGMA) and 2 mg of aluminium hydroxide gel in physiological saline was intraperitoneally injected. After 2 weeks, 0.2 ml of a solution of 2  $\mu g$  of OVA in physiological saline was intraperitoneally injected for a booster. After 1 week, each of mice was put in a nebulizing container (an airtight polycarbonate container, 24.5 cm in inner diameter and 20 cm in effective inner height, equipped with 12 cylindrical tubes of 4.8 cm in inner diameter and 12 cm in height) and made inhale a solution of 5 % ovalbumin (Grade III, SIGMA) in physiological saline for 20 minutes with an ultrasonic neblizer (Omron Tateisi Elec-Tronics co., NE-U12) for the challenge of antigen.

- 3) Administration of the compound of the present invention
- [0198] The compound (I-963) of the present invention was dissolved in N. N-dimethylacetoamide (Nakaraitesk) and diluted one twentieth with miglyol 812 neutral oil (Mitsuba Trading Co., Ltd.) and the solution was orally administered to mice at 40 mg/kg. The administration was continued for 9 days from the booster day to the day before broncho-alveolar lavage.
- 4) Broncho-alveolar lavage (BAL)
- [0199] After 48 hours of the challenge of antigen, the mice were exsanguinated from hearts under ether anesthetic, and the trachea was then cannulated. 0.3 ml of PBS were injected into the lungs and collected, and reinjected four times more (total 1.5 ml).
- 5) Measurement of the total cell number in BAL solution and classification of inflammatory cells
- [0200] After calculation of the total cell number by coloring of a part of BAL solution with Türk solution, cells in BAL solution were put on a slide glass with cytospin (SHANDON) for May-Grünwald-Giemsa (MERCK) staining. Under a microscope, 500 cells were classified to a macrophage, an eosinophil, a neutrophil and a lymphocyte and a proportion of each type of the cells was calculated. The number of each type of the cells was calculated by a multiplication of its proportion and the total cell number.
- 40 2. Results
  - [0201] The results are shown in Figure 4. As shown in the figure, the compound (I-963) of the present invention significantly suppresses increasing number of eosinophils and neutrophils by the challenge of antigen.
- 45 Experiment 8 Suppressive effect on the cytokine production of a mouse T cell strain EL-4
  - [0202] In 48-well plate were added 2 x  $10^5$  mouse T cell strain EL-4 which were suspended in 0.2 ml of 1 % fetal bovine serum-added RPMI 1640 medium (2 mM of sodium bicarbonate, 50 units/ml of penicillin, 50  $\mu$ g/ml of streptomycin and 5 x  $10^{-5}$  M of 2-mercaptoethanol were added) and the compound of the present invention of a pre-determined concentration. TPA was added as a cell stimulater at a final concentration of 10 ng/ml to adjust a final volume of each well to 0.4 ml. Each compound of the present invention was dissolved in DMSO and diluted with the above RPMI 1640 medium, and then for added at a final concentration of 100 ng/ml or less. The cells in the 48-well plate were cultivated in an incubator keeping the humidity 100 %, carbon dioxide 5 % and air 95 % at 37 °C for 24 hours to collect a supernatant of each well. The amount of IL-2, IL-4 and IL-5 released in the medium of each well were measured with the ELISA kit (Amersham K. K.) to be taken as an index of the cytokine production of the cells. TPA free group (-TPA) was used as a control. The results are shown in Table 334.

Table 334

Commond	ICso (ng/ml)			
Compound	IL-2	IL-4	IL-5	
I-4	>500	14	120	
I-37	>500	7	110	
I-39	1300	7	130	
I-70	>2000	0.2	1000	
I-73	500	20	15	
I-83	>10000	140	1000	
I-128	>10000	140	450	
I-148	>10000	100	11000	
I-157	>10000	170	>10000	
I-189	>10000	100	10000	
I-190	>100	7	10	
I-202	>2000	<20	<20	
I-209	>200	14	12	
I-213	>1000	25	23	
I-218	>1000	4.8	30	
I-220	>1000	150	720	
I-223	1000	16	45	
I-226	880	17	300	
I-228	>1000	21	30	
I-229	>1000	42	80	
I-230	>1000	13	20	
I-231	>500	9.6	9.2	
I-233	>1000	12	3.8	
I-237	>100	17	100	

I-238	>1000	35	>1000
I-239	>1000	54	900
I-242	>1000	100	880
I-243	>500	63	>550
I-279	>1000	38	90
I-282	>500	<5	130
I-292	>1000	72	600
I-296	>1000	70	47
I-301	500	<10	120
I-302	>1000	25	280
I-305	>1000	10	340
I-307	>1000	52	23
I-309	>500	29	10
I-318	>1000	68	58
I-323	>1000	230	24
I-368	>1000	72	380
I-375	>1000	200	>1000
I-379	>1000	88	>1000
I-386	>1000	68	40
I-387	>1000	75	40
I-390	>1000	200	160
I-392	>1000	50	>1000
I-395	>1000	1-10	>1000
I-403	>1000	13	>1000
I-720	>500	6	110

## Formulation Example 1

45 [0203]

The compound of the present invention

Starch

Lactose

Crystalline cellulose

Polyvinyl alcohol

Distilled water

Calcium stearate

15 mg

15 mg

15 mg

15 mg

30 ml

[0204] After all of the above ingredients except for calcium stearate were uniformly mixed, the mixture was crushed and granulated, and dried to obtain a suitable size of granules. After calcium stearate was added to the granules, tablets were formed by compression molding.

5 Industrial Applicability

[0205] As indicated in the above experiments, the compound of the present invention has a potent immunosuppressive and/or anti-allergic activity. The compound of the present invention and a substance which has the same activity as the compound of the present invention are very useful for a selective suppressor of the IgE production, an immunosuppressive agent and/or an anti-allergic agent.

#### Claims

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- A selective suppressor of the IgE production comprising a compound which suppresses the IgE production in a
  process from a differentiation of a mature B cell into an antibody-producing cell to the production of an antibody and
  which does not suppress or weakly suppresses the production of IgG, IgM and/or IgA which are produced at the
  same time.
- 2. The selective suppressor of the IgE production claimed in claim 1, wherein a suppression of the IgE production is 10,000 times or more that of the IgG, IgM and/or IgA production.
- 3. The selective suppressor of the IgE production claimed in claim 1 which does not suppress 50 % or more of the IgG, IgM and/or IgA production even at 10,000 times of the concentration at which 50 % of the IgE production is suppressed as compared with that in the absence of the suppressor.
- 4. The selective suppressor of the IgE production claimed in claim 1, 2 or 3 which suppresses 90 % or more of the IgE production, as compared with that without administration of the suppressor, at which dosage the suppressor does not suppress or weakly suppresses the IgM, IgG and/or IgA production when the suppressor is administered to a mammal sensitized by an allergen.
- 5. The selective suppressor of the IgE production claimed in claim 1, 2, 3 or 4 which suppresses infiltration of an inflammatory cell to tissue.
- The selective suppressor of the IgE production claimed in claim 5 wherein the inflammatory cell is an eosinophil and/or a neutrophile.
- 7. A compound of the formula (I):

$$R^{1}$$
 $R^{4}$ 
 $R^{5}$ 
 $R^{8}$ 
 $R^{9}$ 
 $R^{12}$ 
 $R^{13}$ 
 $R^{13}$ 
 $R^{13}$ 

wherein R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup>, R<sup>9</sup>, R<sup>10</sup>, R<sup>11</sup>, R<sup>12</sup> and R<sup>13</sup> are each independently hydrogen, hydroxy, halogen, carboxy, optionally substituted lower alkyl, optionally substituted lower alkoxy, optionally substituted lower alkylthio, optionally substituted lower alkylthio, optionally substituted lower alkylsulfonyl, optionally substituted lower alkylsulfonyl, optionally substituted lower alkylsulfonyl, optionally substituted lower alkylsulfonyl, optionally substituted amino, optionally substituted carbamoyl, optionally substituted sulfamoyl or optionally substituted heterocyclyl,

X is -O-, - $CH_2$ -,- $NR^{14}$ - wherein  $R^{14}$  is hydrogen, optionally substituted lower alkyl, optionally substituted lower alkenyl or acetyl, or -S(O)p- wherein p is an integer of 0 to 2,

Y is optionally substituted lower alkyl, optionally substituted lower alkenyl, optionally substituted lower alkynyl, optionally substituted acyl, optionally substituted cycloalkyl, optionally substituted cycloalkenyl, optionally substituted aryl or optionally substituted heterocyclyl, and Y may optionally be substituted lower alkoxy when X is -CH<sub>2</sub>- and may optionally be substituted lower alkoxycarbonyl, optionally substituted lower alkylsulfonyl or optionally substituted arylsulfonyl when X is -O- or -NR<sup>14</sup>-,

 $R^1$  and  $R^4$ ,  $R^1$  and  $R^2$ ,  $R^2$  and  $R^3$ ,  $R^4$  and  $R^5$ ,  $R^6$  and  $R^7$ ,  $R^8$  and  $R^9$ ,  $R^{10}$  and  $R^{11}$ ,  $R^{12}$  and  $R^{13}$ ,  $R^{11}$  and -X-Y, or  $R^{13}$  and -X-Y taken together may form a 5- or 6-membered ring which may contain one or more of O, S or  $NR^{15}$  wherein  $R^{15}$  is hydrogen, optionally substituted lower alkyl, optionally substituted arylsulfonyl and which may optionally be substituted,

excluding compounds wherein one or more of R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup> and R<sup>9</sup> are halogen and the others are hydrogen, compounds wherein all of R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup> and R<sup>9</sup> are halogen and compounds wherein all of R<sup>2</sup>-R<sup>13</sup> are hydrogen, halogen or cyano,

provided that  $R^1$  is not hydrogen, fluorine, optionally substituted lower alkyl or optionally substituted lower alkoxy, all of  $R^2$ ,  $R^3$ ,  $R^4$ ,  $R^5$  and  $R^{12}$  are hydrogen, or  $R^{13}$  is not hydrogen or halogen when  $R^6$ ,  $R^7$ ,  $R^8$  and  $R^9$  are all simultaneously hydrogen, and further provided that  $R^1$  is not methyl or acetyloxy,  $R^{13}$  is not hydrogen, optionally substituted lower alkoxycarbonyl or optionally substituted carbamoyl, or - X-Y is not methoxy when at least one of  $R^6$ ,  $R^7$ ,  $R^8$  and  $R^9$  is a substituent other than hydrogen, and excluding a compound of the formula (I'):

wherein R<sup>1'</sup> is hydrogen or hydroxy and R<sup>13'</sup> is hydroxy or methoxy, pharmaceutically acceptable salt, hydrate or prodrug thereof.

- 8. The compound claimed in claim 7 wherein R<sup>1</sup> is hydrogen, hydroxy, halogen, carboxy, optionally substituted lower alkyl, optionally substituted lower alkoxy, optionally substituted lower alkylthio, optionally substituted lower alkoxycarbonyl, optionally substituted lower alkylsulfonyl, formyl, optionally substituted amino, lower alkylsulfinyl, acyloxy, nitro, cyano, optionally substituted sulfamoyl or heterocyclyl,
  - R<sup>2</sup> is hydrogen, hydroxy, halogen, optionally substituted lower alkyl or optionally substituted lower alkylsulfonyloxy.
  - R<sup>3</sup> is hydrogen, hydroxy, halogen or optionally substituted lower alkoxy,
  - R<sup>4</sup> is hydrogen, optionally substituted lower alkyl, halogen, optionally substituted lower alkoxy, nitro or optionally substituted amino,
  - R<sup>5</sup> is hydrogen, optionally substituted lower alkoxy, lower alkoxycarbonyl or carboxy.
  - R<sup>6</sup> is hydrogen, halogen, optionally substituted lower alkyl, carboxy, lower alkoxycarbonyl, nitro, formyl, amino or lower alkylsulfonyloxy,
  - R<sup>7</sup> and R<sup>8</sup> are each independently hydrogen, halogen, optionally substituted lower alkyl, optionally substituted lower alkoxy, formyl or optionally substituted amino,
  - R<sup>9</sup> is hydrogen, hydroxy, carboxy, optionally substituted lower alkyl, optionally substituted lower alkoxy, optionally substituted lower alkoxycarbonyl, optionally substituted lower alkylsulfonyloxy, formyl, optionally substituted carbamoyl or optionally substituted amino.
  - R<sup>10</sup> is hydrogen or lower alkoxy,
  - R<sup>11</sup> is hydrogen, halogen, optionally substituted lower alkyl, carboxy, lower alkoxycarbonyl, optionally substituted lower alkylsulfonyloxy, formyl, nitro or amino,
  - R<sup>12</sup> is hydrogen

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- R<sup>13</sup> is hydroxy, halogen. carboxy, optionally substituted lower alkyl, optionally substituted lower alkoxy, optionally substituted lower alkenyloxy, optionally substituted acyloxy, optionally substituted lower alkylsulfonyloxy, formyl, nitro or optionally substituted amino,
- Y is optionally substituted lower alkyl, optionally substituted lower alkenyl, optionally substituted lower alkynyl,

optionally substituted acyl or optionally substituted cycloalkenyl and Y may be optionally substituted lower alkoxycarbonyl, optionally substituted lower alkylsulfonyl or optionally substituted arylsulfonyl when X is - O- or  $-NR^{14}$ -.

and  $R^1$  and  $R^2$ ,  $R^1$  and  $R^4$ ,  $R^8$  and  $R^9$ ,  $R^{11}$  and -X-Y, or  $R^1$  and -X-Y taken together may form a 5- or 6-membered ring which contains one or more of O or  $NR^{15}$  wherein  $R^{15}$  is the same as defined in claim 7 and which may optionally be substituted,

pharmaceutically acceptable salt, hydrate or prodrug thereof.

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- 9. The compound, pharmaceutically acceptable salt or hydrate thereof claimed in claim 7 or 8 which has an immunosuppressive effect.
- 10. The pharmaceutical composition comprising the compound, pharmaceutically acceptable salt, hydrate or prodrug thereof claimed in claim 7 or 8.
- 15 11. An immunosuppressor comprising the compound, pharmaceutically acceptable salt, hydrate or prodrug thereof claimed in claim 7 or 8.
  - An anti-allergic agent comprising the compound, pharmaceutically acceptable salt, hydrate or prodrug thereof claimed in claim 7 or 8.
  - 13. An immunosuppressor comprising a compound of the formula (I"):

$$R^{1}$$
  $R^{5}$   $R^{8}$   $R^{9}$   $R^{12}$   $R^{13}$   $R^{13}$ 

wherein R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup>, R<sup>9</sup>, R<sup>10</sup>, R<sup>11</sup>, R<sup>12</sup> and R<sup>13</sup> are each independently hydrogen, hydroxy, halogen, carboxy, optionally substituted lower alkyl optionally substituted, lower alkoxy, optionally substituted lower alkenyl, optionally substituted lower alkylthio, optionally substituted lower alkylsulfonyl, optionally substituted lower alkylsulfonyloxy, optionally substituted lower alkylsulfonyloxy, optionally substituted lower alkylsulfonyloxy, optionally substituted amino, optionally substituted carbamoyl, optionally substituted sulfamoyl or optionally substituted heterocyclyl,

X is -O-, -CH<sub>2</sub>-, -NR<sup>14</sup>- wherein R<sup>14</sup> is hydrogen, optionally substituted lower alkyl, optionally substituted lower alkenyl or acetyl, or -S(O)p- wherein p is an integer of 0 to 2,

Y is optionally substituted lower alkyl, optionally substituted lower alkenyl, optionally substituted lower alkynyl, optionally substituted acyl, optionally substituted cycloalkyl, optionally substituted cycloalkenyl, optionally substituted aryl or optionally substituted heterocyclyl, and Y may optionally be substituted lower alkoxy when X is - CH<sub>2</sub>- and may optionally be substituted lower alkoxycarbonyl, optionally substituted lower alkylsulfonyl or optionally substituted arylsulfonyl when X is - O-or -NR<sup>14</sup>-,

 $R^1$  and  $R^4$ ,  $R^1$  and  $R^2$ ,  $R^2$  and  $R^3$ ,  $R^4$  and  $R^5$ ,  $R^6$  and  $R^7$ ,  $R^8$  and  $R^9$ ,  $R^{10}$  and  $R^{11}$ ,  $R^{12}$  and  $R^{13}$ ,  $R^{11}$  and -X-Y, or  $R^{13}$  and -X-Y taken together may form a 5-or 6-membered ring which may contain one or more of O, S or  $NR^{15}$  wherein  $R^{15}$  is hydrogen, optionally substituted lower alkyl, optionally substituted lower alkenyl or optionally substituted arylsulfonyl and which may optionally be substituted, excluding a compound of the formula (I'):

wherein R<sup>1'</sup> is hydrogen or hydroxy and R<sup>13'</sup> is hydroxy or methoxy, pharmaceutically acceptable salt, hydrate or prodrug thereof.

- 14. An anti-allergic agent comprising the compound of the formula (I"), pharmaceutically acceptable salt, hydrate or prodrug thereof according to claim 13.
- 15. A process for producing a compound of the formula (I""):

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$$R^{1}$$
  $R^{4}$   $R^{5}$   $R^{8}$   $R^{9}$   $R^{12}$   $R^{13}$   $R^{13}$ 

wherein R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup>, R<sup>9</sup>, R<sup>10</sup>, R<sup>11</sup>, R<sup>12</sup> and R<sup>13</sup> are each independently hydrogen, hydroxy, halogen, carboxy, optionally substituted lower alkyl, optionally substituted lower alkoxy, optionally substituted lower alkylthio, optionally substituted lower alkylsulfonyl, optionally substituted lower alkylsulfonyl, optionally substituted lower alkylsulfonyl, optionally substituted lower alkylsulfonyloxy, optionally substituted lower alkylsulfonyloxy, optionally substituted amino, optionally substituted carbamoyl, optionally substituted sulfamoyl or optionally substituted heterocyclyl,

X is  $-O_-$ ,  $-CH_2$ -,  $NR^{14}$ - wherein  $R^{14}$  is hydrogen, optionally substituted lower alkyl, optionally substituted lower alkenyl or acetyl, or -S(o)p- wherein p is an integer of 0 to 2,

Y is optionally substituted lower alkyn, optionally substituted lower alkynyl, optionally substituted acyl, optionally substituted cycloalkyl, optionally substituted cycloalkenyl, optionally substituted cycloalkenyl, optionally substituted acyl or optionally substituted heterocyclyl, and Y may optionally be substituted lower alkoxy when X is - CH<sub>2</sub>- and may optionally be substituted lower alkoxycarbonyl, optionally substituted lower alkylsulfonyl or optionally substituted arylsulfonyl when X is - O- or -NR<sup>14</sup>-,

R<sup>1</sup> and R<sup>4</sup>, R<sup>1</sup> and R<sup>2</sup>, R<sup>2</sup> and R<sup>3</sup>, R<sup>4</sup> and R<sup>5</sup>, R<sup>6</sup> and R<sup>7</sup>, R<sup>8</sup> and R<sup>9</sup>, R<sup>10</sup> and R<sup>11</sup>, R<sup>12</sup> and R<sup>13</sup>, R<sup>11</sup> and -X-Y, or R<sup>13</sup> and -X-Y taken together may form a 5-or 6-membered ring which may contain one or more of O, S or NR<sup>15</sup> wherein R<sup>15</sup> is hydrogen, optionally substituted lower alkyl, optionally substituted lower alkenyl, optionally substituted arylsulfonyl, and which may optionally be substituted.

excluding a compound wherein one or more of R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup> and R<sup>9</sup> are halogen and the others are hydrogen, compounds wherein all of R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup> and R<sup>9</sup> are halogen and compounds wherein all of R<sup>2</sup>-R<sup>13</sup> are hydrogen, halogen or cyano,

provided that R<sup>1</sup> is not hydrogen, fluorine, optionally substituted lower alkyl or optionally substituted lower alkoxy, all of R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup> and R<sup>12</sup> are hydrogen or R<sup>13</sup> is not hydrogen or halogen when R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup> and R<sup>9</sup> are all simultaneously hydrogen,

and further provided that  $R^1$  is not methyl or acetyloxy,  $R^{13}$  is not hydrogen, optionally substituted lower alkoxycarbonyl or optionally substituted carbamoyl or - X-Y is not methoxy when at least one of  $R^6$ ,  $R^7$ ,  $R^8$  and  $R^9$  is a substituent other than hydrogen, pharmaceutically acceptable salt or hydrate thereof, which comprises reacting a compound of the formula (II):

$$Z \xrightarrow{R^{10}} R^{11}$$
 $Z \xrightarrow{R^{12}} R^{13}$ 
 $X - Y \quad (II)$ 

with a compound of the formula (III):

wherein, in the formulas (II) and (III), R<sup>1</sup>-R<sup>13</sup>, X and Y are the same as defined in claim 7, either of A and Z is dihydroxyborane, di(lower)alkoxyborane, di(lower)alkylborane,

$$O$$
B-,  $O$ B- or  $O$ B-

and the other is halogen or  $-OSO_2(C_qF_{2q+1})$ - wherein q is an integer of 0 to 4, or reacting a compound of the formula (II'):

$$R^1 \longrightarrow Z$$
 (II')

with a compound of the formula (III'):

$$A = \begin{bmatrix} R^{6} & R^{7} & R^{10} & R^{11} \\ R^{8} & R^{9} & R^{12} & R^{13} \end{bmatrix} \times (III')$$

wherein, in the formulas (II') and (III'),  $R^1$  -  $R^{13}$ , X and Y are the same as defined in claim 7 and A and Z are the same as defined in the above formulas (II) and (III).

16. The process for producing the compound of the formula (I"), pharmaceutically acceptable salt or hydrate thereof according to claim 15 comprising the reaction of a compound of the formula (IV):

$$A^{1} \xrightarrow{R^{8} \quad R^{7}} A^{2} \quad (IV)$$

with a compound of the formula (V):

$$\begin{array}{c|cccc}
R^2 & R^3 \\
R^1 & Z^1 & (\vee) \\
R^4 & R^5
\end{array}$$

wherein, in the formulas (IV) and (V), R<sup>1</sup> - R<sup>9</sup> are the same as defined in the formula (I) in claim 7, Z<sup>1</sup> is the same as Z defined in the formula (II) in claim 15, A<sup>1</sup> and A<sup>2</sup> are each independently the same as A defined in the formula (III) in claim 15, and the reactivity of A<sup>1</sup> is higher than or equal to that of A<sup>2</sup>, followed by the reaction with a compound of the formula (VI):

$$Z^{2} \xrightarrow{R^{10}} R^{11}$$

$$Z^{2} \xrightarrow{X-Y} (VI)$$

wherein  $R^{10}$ - $R^{13}$ , X and Y are the same as defined in the formula (I) in claim 7 and  $Z^2$  is the same as Z defined in the above formula (II).

17. The process for producing the compound of the formula (I"), pharmaceutically acceptable salt or hydrate thereof according to claim 15 comprising the reaction of a compound of the formula (IV'):

$$A^{1} \xrightarrow{\mathbb{R}^{8}} A^{2} \quad (IV')$$

wherein  $R^6$ - $R^9$  is the same as defined in the formula (I) in claim 7,  $A^1$  and  $A^2$  are each independently the same as A defined in the formula (III) in claim 15, and the reactivity of  $A^2$  is higher than or equal to that of  $A^1$ , with a compound of the formula (VI) in claim 16, followed by the reaction with a compound of the formula (V) in claim 16.

Figure 1

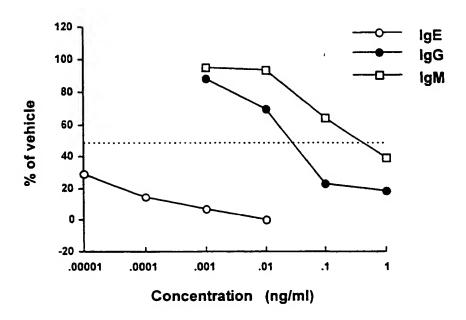


Figure 2

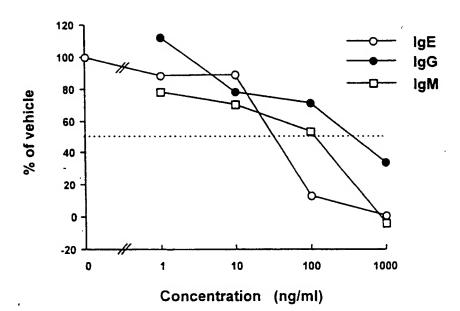


Figure 3

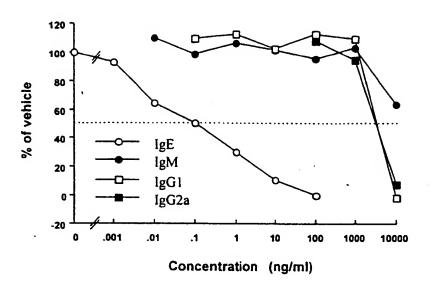
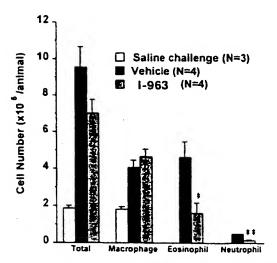


Figure 4



#### INTERNATIONAL SEARCH REPORT International application No. PCT/JP97/02635 CLASSIFICATION OF SUBJECT MATTER Int. C1<sup>6</sup> C07C15/14, C07C25/18, C07C43/20, C07C47/575, C07C65/24, C07C69/734, C07C69/78, C07C205/38, C07C217/80, C07C233/80, According to International Patent Classification (IPC) or to both national classification and IPC FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) Int. C16 C07C15/14, C07C25/18, C07C43/20, C07C47/575, C07C65/24, C07C69/734, C07C69/78, C07C205/38, C07C217/80, C07C233/80, Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) CA(STN), REGISTRY(STN) C. DOCUMENTS CONSIDERED TO BE RELEVANT Relevant to claim No. Citation of document, with indication, where appropriate, of the relevant passages JP, 5-25145, A (Mochida Pharmaceutical Co., Х Ltd.). February 2, 1993 (02. 02. 93), Page 4, left column, lines 2 to 11; example & WO, 93/1815, Al & EP, 548370, Al Х Brune, K. 'IPD-1151T: A Prototype Drug for Ice Antibody Synthesis Modulation', Agents and Actions Supplements, 1991, Vol. 34, p. 369-378 7 - 10 Х Tringali, C. et al. 'Previously unreported pterphenyl derivatives with anti-biotic 15 - 17 γ 11 - 14properties from the fruiting bodies of Sarcodon Α leucopus (Basidiomycetes).', Can. J. Chem., 1987, Vol. 65, p. 2369-2372 7 - 9 Kallitsis, J.K., 'Synthesis and X 15 - 17 10 - 14 Characterization of Soluble Aromatic Polyesters Y Containing Oligophenyl Moieties in the Main Chain.', Macromolecules, 1994, Vol. 27, p. 4509-4515 X Further documents are listed in the continuation of Box C. See patent family annex. later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention Special categories of cited documents: document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international filing date document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) document of particular relevance; the claimed invention cannot be occument of particular relevance; the claimed inventor cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art document referring to an oral disclosure, use, exhibition or other document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family Date of mailing of the international search report Date of the actual completion of the international search October 28, 1997 (28. 10. 97) October 15, 1997 (15. 10. 97) Name and mailing address of the ISA/ Authorized officer Japanese Patent Office

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## INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP97/02635

		101/0	E31/02032
C (Continu	ation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the rele	vant passages	Relevant to claim No.
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#### INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP97/02635

## A. (Continuation) CLASSIFICATION OF SUBJECT MATTER

C07C235/46, C07C251/34, C07C275/28, C07C281/02, C07C281/06, C07C311/22, C07C317/16, C07C323/10, C07D213/30, C07D215/14, C07D233/64, 103, C07D257/04, C07D295/22, C07D303/26, C07D309/22, C07D317/54, C07D319/20, C07D493/05, C07D271/10, C07D333/28, A61K31/09, A61K31/10, A61K31/11, A61K31/135, A61K31/15, A61K31/155, A61K31/165, A61K31/17, A61K31/18, A61K31/19, A61K31/195, A61K31/215, A61K31/235, A61K31/24, A61K31/255, A61K31/27, A61K31/275, A61K31/335, A61K31/34, A61K31/35, A61K31/36, A61K31/38, A61K31/41, A61K31/415, A61K31/44, A61K31/47, A61K31/535, A61K31/60

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